THE

ELEMENTS OF MEDICINE;

OR,

A TRANSLATION

OF THE

ELEMENTA MEDICINÆ BRUNONIS.

WITH LARGE

NOTES, ILLUSTRATIONS, AND COMMENTS.

BY THE AUTHOR OF THE ORIGINAL WORK.

IN TWO VOLUMES.

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M DCC LXXXVIII.

THE ELEMENTS OF MEDICINE.

CHAP. IX.

A Comparison of the different Parts of the Sthenic Plan of Cure with each other.

CCLXXXI. As, in the ſthenic diatheſis, bleeding is the moſt powerful remedy of all others, being that, which completely carries off a ſtimulus, as much more powerful *than any other*, as it is directly applied to a greater extent over the ſyſtem; conſequently, as often as the diatheſis is very high, it ſhould be freely uſed; but never riſked during prediſpoſition, and ſparingly, or not

at all, ventured upon in diſeaſes of a gentle nature; in which other remedies ſhould be preferred (*a*).

CCLXXXII. The next place of importance to *bleeding*, when heat and other ſtimuli are guarded againſt, is claimed by cold. Heat is always hurtful, and ſtill more ſo after a previous application of cold; but it is moſt hurtful, when it is alſo combined with other exceſſive ſtimulant powers. Cold is always of ſervice, and in proportion to its degree; provided foreign ſtimuli, blended with it, and overcoming *its debilitating effect*, be cautiouſly ſhunned.

CCLXXXIII. The third place in rank after theſe remedies is claimed by vomiting and purging and ſweating. Theſe evacuations have a powerful effect in removing ſthenic diatheſis, and therefore do they, with great advantage,

(*a*) See above, par. CCLXIX. With the exception of peripneumony, phrenits, and violent and miſmanaged caſes of the ſmall-pox and meaſles, and rheumatiſm; in the laſt in their mild ſtate, as well as all the other ſthenic caſes, the lancet ſhould never be unſheathed. That is to ſay, in ſeven caſes out of ten even of the ſthenic diſeaſes, which are the only ones that either require or bear any degree of it, the practice muſt be laid aſide, and never thought of in any aſthenic affections whatever. Conſequently, the caſes, where it is in any degree allowable, are exceedingly few.

ſuperſede

ſuperſede the oftener imaginary, than real, neceſſity of profuſe bleeding. They are often alone ſufficient to reſtore the healthy ſtate.

CCLXXXIV. Together with all theſe, the articles of diet, the ſtimulant operation of which prevents the benefits to be received from them, ſhould be ſparingly uſed, and that in *exact* proportion to the degree of the diatheſis. This precaution alone is adequate to the removal of prediſpoſition, and often to that of diſeaſes, eſpecially thoſe that depend upon a ſmall and gentle diatheſis.

CCLXXXV. Alſo with all *the remedies yet mentioned* we muſt conjoin reſt, when the diſeaſed ſtate has taken place, and moderation in motion during the period of prediſpoſition (*b*).

CCLXXXVI. The practice of the common run of phyſicians is very bad, in going too much upon any one of the remedies *that have been mentioned*, and overlooking all the reſt, or enjoining them careleſsly. We are

(*b*) So conſiderable a ſtimulus is exerciſe, that, if in ſuch a degree of ſthenic diatheſis, as that, which forms only prediſpoſition to the diſeaſes depending on it, exerciſe may of itſelf be ſufficient to effect the converſion of the prediſpoſition into the actual diſeaſed ſtate. Often has the higheſt of theſe diſeaſes, and even peripneumony itſelf, been brought on by violent exertion in exerciſe.

not to depend upon bleeding alone, not even in peripneumony itſelf; but employ all the reſt either in concourſe or ſucceſſion.

CCLXXXVII. The diſturbed functions, or thoſe that are impaired (*c*) not from a debilitating cauſe, admit of the general *plan of* cure, and no other.

CCLXXXVIII. The ſymptoms of debility, which are the conſequence of the violence of the ſthenic diatheſis, in the progreſs of the diſeaſe, and that threaten death by indirect debility, ought to be prevented by an early interpoſition of the remedies.

CCLXXXIX. The ſame early cure ſerves to prevent ſuppuration, effuſion, and gangrene, which ariſe from ultimately exceſſive excitement, paſſing into indirect debility.

v. If ſthenic diatheſis (*s*) ſhould happen to be conjoined with a local diſeaſe, the former, to prevent it from aggravating the latter, ſhould be removed by its own reſpective remedies.

(*c*) See above, par. CXLVII. CLI. CLXXII.

CHAP.

CHAP. X.

The same Comparison of the different Parts of the Asthenic Plan of Cure with one another.

CCXC. IN asthenic diathesis, and the diseases depending upon it, reproducing the *lost* quantity of blood, is the most powerful remedy, when we, at last, find access to it, as being the only means of restoring a stimulus of so much more power and efficacy, that its direct application is made to so great an extent of the system (*a*). For which reason, as, in every degree of debility, the quantity of food, from which only blood is made, that is taken and digested, is always in an inverse proportion to the degree of debility (*b*); so much, and of such a form, as can be taken and digested, should immediately, and without loss of time, be administered; on which account, if the debility be moderate, giving

(*a*) Compare this with par. CCLXXXI. above, and with all the paragraphs from CXXXI. to an CXXXVI.

(*b*) Or in a direct proportion to the degree of excitement.

ſolid animal food ſparingly each time, but often repeated, is proper and ſuitable. When the debility is greater, and ſolid animal food can neither be taken, nor, if taken, digeſted, broth made from it, as rich as poſſible, and as free of fatty matter, ſhould be carefully administered (*c*). *With this view* to excite the ſtomach, and render it more fit for receiving and digeſting the food *juſt now* mentioned; the diffuſible ſtimuli, ſuch as different kinds of wine, and more particularly ſtill opiates and other remedies of ſimilar powerfulneſs, ought to be conſtantly employed; ſparingly at firſt, and afterwards more fully, if the debility be direct: after which, the uſe of the diffuſible ſhould be gradually laid aſide, and, in the ſame gradual way, recourſe be had to a larger and larger uſe of the more durable and natural ſtimuli (*d*). In *the caſe of* indirect debility, we ſhould alſo gradually proceed from the higheſt to the loweſt force of ſtimulus, as has been mentioned formerly (*e*), and, in an inverſe manner, go on from the ſmalleſt force of durable ſtimulus to the greateſt. Laſtly, in that

(*c*) Compare this with par. CCLXXII.

(*d*) See laſt note (*e*), and compare it it with this.

(*e*) Par. CIII.

moderate

moderate debility, which conſtitutes the predispoſition to aſthenic diſeaſes, it muſt always be kept in mind, that an abundance of blood is the greateſt ſupport of health *(f)*, and that we are not to give way to a weakened appetite (*g*).

CCXCI. To the vital fluid, and the ſeveral means of encreaſing its quantity, which have juſt now been mentioned (*h*), the next remedy in the cure of aſthenic diatheſis is heat; as being the power by which animals (*i*), in their firſt formation, in their growth, and moſt eſpecially in their decay, are brought forth into exiſtence, are nouriſhed, and acquire vigour, and afterwards, through *the ſeveral degrees of* their declining ſtate, are to

(*f*) How widely different is that maxim from any that have hitherto ever been received in the profeſſion of phyſic; in which flying to the uſe of the lancet, was the firſt thought that aroſe in the mind, with reſpect to the idea of cure of every diſeaſe; and bleeding and evacuations, through the courſe of each diſeaſe, the only remedies.

(*g*) This is equally the reverſe of the general practice of inanition in almoſt every diſeaſe, without a ſingle exception.

(*h*) The addition in MS to the text for theſe laſt words is, " et relatis ejus copias augendas rationibus."

(*i*) And wemay add v egetables.

ſome extent upheld, till their excitement is all extinguiſhed (*k*). By heat, underſtand that point of external temperature, which intervenes as a mean betwixt cold, as it is called, and high heat (*l*); under which our ſenſe of temperature is agreeable and pleaſant; under which the body is neither weakened by that relaxation which produces ſweat, nor by that torpor (*m*) which cold begets, *where the debility is*, in this caſe, direct, and in the former indirect; under which the functions of the whole body are excited, called forth, and, as it were, cheriſhed in the ſun beams; without which all other ſtimuli are of no effect (*n*).

CCXCII. Such a temperature as that is ſuited to every ſtate of the body, but ſtill more to

(*k*) Compare this with par. CXII. and CCLIV. and CCLX.

(*l*) The Latins have a ſingle word for this which we want; the word is *ardor*.

(*m*) Or benumbed ſtate.

(*n*) It is plain, that though all the other powers ſhould be in full action upon our bodies, and that with the effect of keeping up in them a due degree of excitement over all; yet plunging any perſon naked into a denſe medium, ſuppoſe that of water, in a degree of cold at or under the freezing point, will moſt certainly, in an inſtant, put an end to life.

its

its different states of debility; becauſe, *in the latter caſe*, as the excitement is deficient from other ſources, there is ſo much more occaſion for this ſtimulus, which is much eaſier come at than many others, *to ſupply ſuch deficiency*. Hence, both in other diſeaſes of great and direct debility, and particularly in fevers, heat is found to be of the greateſt benefit, and above all others in all ſuch complaints of that kind, as cold has had any ſhare in producing (*o*). In the ſame diſeaſes cold muſt be moſt carefully avoided, as it is always of a directly debilitating operation, and never of ſervice but in ſthenic diſeaſes, and thoſe that are in a progreſs to indirect debility (*p*). We muſt be equally on guard, in every degree of aſthenic diatheſis, againſt exceſſive heat; which is equally debilitating as cold, and equally productive of aitony, laxity, and gangrene of the

(*o*) See again, par. CCLX.

(*p*) The operation of cold has been ſo widely miſtaken by all phyſicians, that it comes to be of the greateſt conſequence to underſtand the ſeveral propoſitions ſtated in this work with regard to it. For that purpoſe conſult par. XXXVII. and the note upon it marked θ. as well as par. CCLX. and all that has been ſaid upon the ſubjects of either heat or cold in Chap. I. of the ſecond Part, from CXII. to CXXIII. as alſo par. CXX.

veſſels, as well as ſtagnation and corruption of the fluids, in conſequence of the inactive ſtate of the veſſels (*q*).

CCXCIII. As refilling the veſſels is the greateſt remedy, becauſe its direct ſtimulus is applied over ſuch an extent of the ſyſtem; for that reaſon heat, which is immediately applied to the whole ſurface of the body, and directly affects the body to that extent, ſhould be next in virtue *to it*.

CCXCIV. Since vomiting, purging (*r*) and ſweating (*s*) are ſo powerful in debilitating, as to claim the third place of rank in the ſthenic cure; they muſt, for that reaſon, by the ſame debilitating operation, be equally hurtful in aſthenic diatheſis, and the ſtimuli that ſtop their operation; and, conſequently, both the other ſtimuli, and particularly the diffuſible ones, equally ſerviceable.

CCXCV. To run over the liſt of ſtimuli, that anſwer this purpoſe, we muſt begin with the cure of that ſlighter loſs of fluids *that*

(*q*) With this propoſition compare par. CXV. CXVII. and CXVIII.

(*r*) See par. CCLXXXIII.

(*s*) See par. CCLV.

occur

occur in thoſe diſeaſes, and proceed to the more violent kinds of them.

In a ſlight looſeneſs of belly, ſuch as happens in prediſpoſition to aſthenic diſeaſes, or in the ſlighter degrees of the latter; it will be commonly ſufficient to abſtain from vegetable food, and from weak, watery drink, or that *kind of it that* ferments *in the firſt paſſages*, ſuch as the ſeveral drinks made from barley, called beers; to uſe animal food, as well ſeaſoned and as rich, as poſſible, and free of all fatty matter; to drink pure wine, or ſpirit, in different degrees of ſtrength; and to take *ſuch* exerciſe *as is* gentle in degree, and often repeated (*t*).

CCXCVI. When the belly is ſtill looſer, and *with that affected* with gripes and pains, as happens in the violent diarrhæa, and in the dyſentery in which the looſe ſtools are accompanied with vomiting; or when, without theſe troubleſome ſymptoms *affecting* the belly, diſtreſſing vomiting is an urgent ſymptom; or, when the vomiting is conjoined with a moiſture upon the ſurface, or macerating ſweat;

(*t*) See and compare, for the more clear underſtanding of this paragraph, the CCLXVI. CCLXVIII. CCLXXIII.

or

or when ſweat is the only urgent ſymptom, and *as ſuch* waſtes the ſtrength, exhauſts the body, and diſſipates the fluids: in all theſe caſes, we muſt have immediate recourſe to the moſt diffuſible ſtimuli, and check ſuch an impoveriſhment of the fluids *of the ſyſtem.*

CCXCVII. In which caſe, the uſe of ſtimuli will be ſo much the more neceſſary, that other ſymptoms uſually accompany thoſe encreaſed excretions. Their great efficacy, and ſtimulant power, is proved by their ſingular virtue *in removing* thoſe and other *ſymptoms* in fevers and other moſt violent ſthenic diſeaſes, nay, in the article of death itſelf, from ultimate debility.

CCXCVIII. Accordingly, in ſpaſms and convulſions, in the internal, in the external, parts (*u*), in bleeding diſcharges (*x*), in the direful delirium of fevers, and other very violent diſeaſes (*y*), in aſthenic inflammation (*z*); when thoſe ſtimuli, which have a more permanent influence, fail, or act to no *good* pur-

(*u*) See par. CXCV. and CXCVI.

(*x*) See par. CXXXIV. χ. ψ. and CCXXXII. and the ſubjoined notes.

(*y*) See par. CXCVIII. CC. CCI.

(*z*) See par. CCIV. to CCXII.

pose; the virtue of the diffusible stimulants, the principal of which is opium, is eminent.

CCXCIX. As, therefore, the energy of that stimulant virtue serves to check looseness of the belly, and vomiting, or even sweating, when these symptoms are gentle, and depend upon a less violent *degree* of the cause; so that degree of its power, which is fitted to check these affections in the greatest height of their violence, and to re-establish the state of health, is by far the greatest of all the powers, which are ever applied to the human body; which may be known from this proof, that when the action of all the other powers by which life is supported, is of no effect, they turn aside the instant stroke of death.

CCC. The most weak degree of the diffusible stimuli (*a*) are the white wines, except madeira, canary, good sherry; and the red wines, except port and spirits procured by distillation, so diluted, as to equal the strength of the wines, or exceed it a little. Still higher than these are the latter *taken* pure, and higher still, those that have undergone many rectifications. The strength of which is in pro-

(*a*) See above par. CXXVI. ο. π. ϱ. ς.

portion

portion to the quantity of water expelled, and of the alkatriol retained.

CCCI. A higher place in the ſcale is claimed by muſk, volatile alkali, camphor; our trials of which are not yet ſo complete, as to aſcertain its force exactly: next comes æther, and, laſt of all, opium (*b*). Of all which, however, unleſs, when, as they ſometimes do, they have loſt their effect by a continuance of their application, and are, therefore, ſubſtituted in place of each other, for the ſake of a renewal of the operation of each; and when, in that way, we make the complete round of them, for the ſake of repelling extreme debility; *in every reſpect*, the preparations of opium are ſufficient for moſt purpoſes of high ſtimulating (*c*).

CCCII. Together with all theſe (*d*), regard muſt be had to *the articles of* diet (*e*).

(*b*) A few words with reſpect to the rank of æther in the ſcale are eraſed, as not being correct in point of fact.

(*c*) The original is corrected as follows, " opii formæ ſatis in pleroſque altius ſtimulandi uſus ſunt.

(*d*) They are animal ſoups, and ſolid meat (CCXC.) heat, (CCXCI.) ſtimulants (CCXCV.) diffuſible ſtimulants (CCXCIX.)

(*e*) See par. CCLXXXIV.

And,

And, as in great debility, and the diſeaſes depending upon it, of the only ſuitable matter, that is meat, nothing ſolid can be taken; for that reaſon, the matter to be uſed muſt be fluid, but ſtrong. Animal ſoups ſhould be given ſparingly at a time, but repeatedly, in proportion to the degree of debility, and jellies, both along with the diffuſible ſtimuli. After that, when, chiefly by means of the diffuſive ſtimuli, the ſtrength is in part reſtored; at firſt ſolid meat, likewiſe in ſparing quantities, but often repeated; then giv[illegible] more plentifully, and at greater interval[illegible] be taken. *In which progreſs* the [illegible] ſhould gradually recede from the uſe o[illegible] diffuſible ſtimuli.

CCCIII. When now the diffuſible ſtim[illegible] are altogether laid aſide, and the convaleſcent is given up to his uſual diet, his uſual manner of li[illegible]ng, and that management, which per[illegible] [illegible]health commonly obſerve, (only that [illegible] taken, *than in perfect health*, to [illegible]g that might prove hurtful); [illegible]very attempt of the phyſician [illegible] to the conſideration of the [illegible]nt, as returning, but not yet

yet *quite* eſtabliſhed (*f*). In his movements he ſhould firſt uſe geſtation, and then gentle but frequent exerciſe, and the latter ſhould always end in ſome, but not an high, degree of fatigue. His ſleep ſhould neither be too long, nor too ſhort, leſt the former produce direct, the latter indirect debility (*g*): the moſt nou riſhing food ſhould be taken, but not in too great a quantity, leſt the excitability of the ſtomach be worn off, without the attainment of a due degree of vigour; but it ſhould be often in order to reduce the excitability gra- which only ſerves to produce proper and reduce it to its half waſted (*h*); that degree of heat, which ſtimu- s, ſhould be employed (*i*), and both ex- ceſs of it, as well as cold, as they are equally debilitating, ſhould be avoided; the patient ſhould breathe pure air, and avoid impure; he ſhould keep his mind in gentle ction, obſerve moderation in his paſſions agreeable objects of ſenſe; he companions around him, bu

(*f*) See above par. CV. and C

(*g*) See par. CCXLII. and ſe

(*h*) See above the XXIV.

(*i*) See par. CXII.

and be in frequent gay entertainments; he ſhould travel through a pleaſant country, and be moderate in love. Neither is the management of the ſenſes, and any return of contagious matter to be neglected.

CHAP. XI.

How the Remedies ſhould be varied.

CCCIV. AS the hurtful powers, that produce prediſpoſition to diſeaſes, or diſeaſes themſelves, act ſome on one part, ſome on another, with ſomewhat more force *than on any other equal part*; and as ſuch a part is commonly that which they directly affect (*a*); ſo the powers, which are employed as remedies, in order that their general effect may reach the whole body with the more certainty, ſhould be, *in the ſame manner*, differently applied to different parts.

CCCV. The cure of any ſthenic diſeaſe whatever, is improperly entruſted to bleeding alone, though that is one of the moſt powerful of the debilitating remedies. And the reaſon is, that, though the excitability is ſufficiently reduced *by that remedy* in the greater blood-veſſels, perhaps too much, yet in the extremities of theſe, as well as in the reſt of

(*a*) Par. XLIX.

the body, it is not ſufficiently reduced (*b*). Nor is the alternation of bleeding with purging a perfect ſort of cure; becauſe, though the exceſſive excitement be ſufficiently, and more than ſufficiently, removed in the greater blood-veſſels, and in the innumerable ſmall arteries, whether exhalant or mucous, which diſcharge their fluids into the inteſtines; yet, neither on the perſpiratory terminations of the arteries, nor on the reſt of the body, is an equal debilitating energy exerted: for inſtance, the ſmall veſſels which open into the ſtomach, are not ſufficiently relieved of

(*b*) The action of every exciting power, whether ſalutary or hurtful, or curative, always extends over the whole body, the whole ſeat of excitability, but ſtill with the inequality mentioned in the fourth Chapter of Part Firſt. This is the baſis of the diſtinction with reſpect to the preſent ſubject: which is, that, as every power acts moſt effectually on the part where its action is immediately exerted, it is better to truſt to a number, every one of which poſſeſſes that advantage, than rely on any one, however powerful otherwiſe; as by that means, whatever be the indication, whether it be to encreaſe or diminiſh excitement, the effect will be more equally produced over all in conſequence of their being a number of parts that have had a ſtrong action exerted upon them.

their diſtending (*c*) load. And although vomiting (*d*), which has been improperly left out of the cure of ſthenic diſeaſes, and *ſtill more* improperly employed in *every one of* the aſthenic, ſhould be conjoined with the two remedies juſt now mentioned, even that would not be enough to produce an equality of diminiſhed excitement; as there would ſtill remain in the perſpiratory veſſels, the ſame ſtate of the excitement, which has been mentioned, as in the reſt of the body, that is not vaſcular. In violent ſthenic diſeaſes, therefore, after diminiſhing the diatheſis, and in the ſlighter from the beginning *of the diſeaſe*, the addition of *the operation of* ſweat to the evacuations that have been ſpoken of, will produce a more equal diminution of excitement, a more perfect ſolution of the diſeaſe. For by means of this evacuation, not only from the larger blood veſſels, in the interior parts of the body, but from an infinity of outlets both of the external, and internal ſurface of the body, an immenſe quantity of fluids, every where diſtending, and, *thereby*, pro-

(*c*) and therefore ſtimulating load, the ſtimulus in any veſſel being the quantity of its fluid.

(*d*) See par. CCLXIX.

ducing a very great ſum of excitement, is withdrawn. But the matter ſtops not even here. For, ſince in ſlight ſthenic affections much nouriſhing food, and in them all, too much, can be taken; the conſequence of that muſt be, that, however much the quantity of the blood and other fluids has been diminiſhed, if the food, which is the only *power* that can produce blood, continues to be taken, all the veſſels, in proportion to the quantity that has been taken, will again go on to be filled, and to be fired with the fewel of exceſſive excitement. To prevent which inconvenience, and to diminiſh excitement, ſtill with greater equality over the ſyſtem; abſtinence, or an allowance of vegetable matter in a fluid form, and watery drink, will have a very great effect. But neither does the matter end here. For, if, after taking all the precautions and ſecurities that have been recommended, the degree of heat, that proves hurtful from its ſtimulus, be allowed to approach the external ſurface of the body; it will produce another inequality of excitement, however much that may have been properly and equally diminiſhed by the other means of cure. Wherefore,

fore, as the ſthenic diatheſis depends ſo much upon the ſtimulus of heat, directly affecting the ſkin (*e*), and is, on that account, prevalent in the ſkin in preference to other parts; to make ſure of rendering the diminution of excitement as equal as poſſible, the debilitating effect of cold ſhould be oppoſed to the high degree of excitement, which the heat has produced. When, at laſt, all the *directions*, which have been ſo fully pointed out, have been executed, *ſtill*, to re-produce the equality of excitement, ſuited to good health; it remains, that we be on our guard againſt the ſtimuli that ariſe from the intellectual functions and paſſions. For, as they have a great effect in producing ſthenic diatheſis (*f*), ſo the guarding againſt them, or prevention of them, muſt be equally effectual in removing that *diatheſis*, and in re-producing that equality of excitement, upon which health depends (*g*).

CCCVI. If

(*e*) See par. CXIII.

(*f*) See par. CXXXVIII. CXL.

(*g*) As the moſt healthy ſtate of man is occaſioned not by the operation of any one, or of a few exciting powers, but by the united operation of them all; ſo neither

CCCVI. If the cure of ſthenic diſeaſes hitherto has conſiſted in bleeding, purging of the belly, and in the uſe of refrigeration in a few caſes; and, if the other objects of attention, which have now been ſo fully treated of, have either been totally neglected, or mentioned in a ſlight way, by the by, and as if they had been of no conſequence, and, in the cures which were preſcribed in that way, not reduced to any principle; it will eaſily *now* appear, from what has been ſaid above, and in other parts of this work, how much the knowledge of thoſe diſeaſes has been improved, both in the practical and reaſoning part: and it will now, at laſt, be found a certain and eſtabliſhed fact, that both the nature and true theory of ſthenic diſeaſes, as well as the practice of the cure of them, conſidered either as an art and imitative, or as rational and ſcientific, has been diſcovered and demonſtrated.

CCCVII. As the debilitating or antiſthenic (*h*) remedies are the ſame with the aſ-

neither is its re-eſtabliſhment to be effected, but by the ſame united operation of all the remedies, the laſt of which come to be the ordinary means of the ſupport of the healthy ſtate.

(*h*) See par. XC.

thenic hurtful powers (*i*); ſo the ſthenic remedies (*k*) are alſo the ſame as the ſthenic hurtful powers.

φ. And as the remedies of aſthenic diatheſis (*l*), to whatever part they are applied, alſo ſtimulate that part more *than* any other; ſome of them one, others another part, *and* encreaſe the excitement;

CCCVIII. So, in aſthenic diſeaſes, *if we want* to rouſe the excitement with more equality, and reſtore the *loſt* ſtrength, we muſt not depend upon the moſt diffuſible ſtimuli alone (*m*). For, while they indeed increaſe the excitement over the whole body, at the ſame time, they produce that effect in the ſtomach with greater force *than any where elſe*. Hence, even from the beginning of the cure, when almoſt no food can be taken, and other

(*i*) See par. CCCIV. to CCCVII. the preſent one.

(*k*) See par. XCI.

(*l*) All from the number CCCVII. to this reference, or in the original to "recta admoventur," is a correction of the original in theſe words, "Ut auxilia debilitantia, "ſeu antiſthenica (XC.) eadem, quæ noxæ aſthenicæ "(CCCIV. ad CCCVII.), ita auxilia ſthenica (XCI.) "eadem quoque, quæ noxæ ſthenicæ, ſunt. Utque "diatheſeos aſthenicæ remedia, cuicunque parti," &c.

(*m*) See par. CCCI.

durable

durable and more natural ſtimuli (*n*) are moſt imperfectly applied; yet, together with the diffuſibles, ſoups (*o*) ſhould be given, and as much haſte as poſſible ſhould be made to bring the patient to take ſolid meat, while care, at the ſame time, ſhould be taken to apply a proper degree of heat. For, by this method, we moſt properly ſecure both the internal and external ſurface. Nay, in the ſame way, were move that inanition of the veſſels which takes place in aſthenic diſeaſes in an exact proportion to their degree. For, as in that abundance of blood, which is the moſt powerful means of bringing on ſthenic diſeaſes, there is an opportunity of making a quick cure by the immediate taking of blood; ſo it is only by inſenſible, gradual, imperceptible(*p*), and obſcure ſucceſſive ſteps, that we open the acceſs to the removal of that penury of blood, which proves the moſt hurtful power in aſthenic diſeaſes, and effect the filling of the veſſels again.

(*n*) as that of pure air, exerciſe, the ſtimulus of the motion of the blood and other fluids in their reſpective veſſels

(*o*) See par. CCCII.

(*p*) " & cæca ſerie is added in MS.

CCCIX. After

CCCIX. After this management of both ſurfaces of the body, and this partial filling of the veſſels; ſtill the excitement is not equally enough increaſed. To effect this further in part; at the ſame time ſome moſt diffuſible ſtimulus, ſuppoſe any preparation of opium, ſhould be adminiſtered, and the little animal food, *or meat*, that there is any appetite for, and that can be taken and digeſted, ſhould be added. The idea of giving food is evident from the late explanation given about ſoups (*q*). But, the uſe of the more durable, and leſs diffuſible, ſtimulus depends on this, " that when the excitability is worn out by any one ſtimulus, any new ſtimulus finds excitability, and draws it forth, and thereby produces a further variation of the effect.

CCCX. Hitherto the ſtimulus of the motion, by which all the muſcles, which, from their ſituation on the ſurface of the body, by their contractions propell the blood along the veins to the heart, are thrown into action, has not been ſupplied (*r*); and, therefore,

(*q*) See par. CCCVIII.

(*r*) See par. CXXXVII. α. β. γ. δ. CCLXXIII. CCCIII.

both

both upon account of the emptineſs of the veſſels, and the ſlow circulation from the want of that impulſe, the excitement is not ſufficiently arouſed over all that tract. After the ſtrength has, then, been ſo recruited, that rich food can now be taken, the body can now be rouſed, firſt by foreign, then by its own organs, of which the former is called geſtation, the latter exerciſe, and alſo refreſhed by air; *when all that has happened*, then it is, that the excitement is further raiſed in ſeveral points, and becomes more equal upon the whole.

CCCXI. The laſt ſtimuli to be mentioned, which, *along with thoſe already mentioned*, have a natural tendency to produce an equalization of excitement over the whole ſyſtem, ariſe from the action of the mind, the energy of paſſion or emotion, and a ſtill greater purity of air, than is attainable by perſons ſhut up in a room (*s*). In this ſtate of convaleſcence, the ſame *management*, which

(*s*) See and compare with theſe laſt mentioned ſtimuli the following paragraphs CCLXXV. CCCLXXVIII. CCLXXIX. π.

was

was formerly mentioned upon the going off of ſthenic diſeaſes, perfectly applies (*t*).

CCCXII. The ſtimulant plan of cure, in all its parts, is new, whether the reaſoning part, or the merely practical be regarded; and, whether the cauſe and the exciting hurtful powers, or the indication of cure and the remedies, be conſidered. May it, therefore, be put as a queſtion, whether the whole doctrine, which has hitherto been delivered, has, at laſt, brought forward clear

(*t*) The convaleſcent ſtate from either of the two general forms of diſeaſes, or from local ones the effect of which had drawn the whole ſyſtem into conſent, is much the ſame; being a ſtate of ſome remaining debility in all; in the ſthenic from the excitement either going too low, by the remedies being puſhed to ſome exceſs, or not equally diffuſed over all the parts in conſequence of the natural ſupports only beginning to be brought fully into play; in the aſthenic from the perfect point of health being not quite gained, either from the ſtimulant remedies not having been carried exactly up to 40, or from ſome of them having been carried further than the waſted excitability could receive them with invigorating effect, and thereby an inequality left upon the whole. The convaleſcence, from the general effects upon the conſtitution ſometimes ariſing from local diſeaſes, is to be explained upon the principles laid down, with reſpect to the two other caſes of convaleſcence.

proof,

proof, that the art of medicine, hitherto conjectural (*u*), inconſiſtent with itſelf, altogether incoherent, is now reduced to an exact ſcience, proved not by mathematical principles, which is only one kind of probation, but by phyſical ones, and eſtabliſhed by the certain teſtimony of our ſenſes, nay, and by the very axioms of the mathematical elements?

(*u*). Celſus ſays, ars noſtra conjecturalis eſt. And every man of ſenſe, whether of the profeſſion, or out of it, has held the ſame ſentiments of it. Nothing is more glaring than the contractions in medical writings and reaſoning of every kind, nothing ever could be more incoherent. If a piece of knowledge, that ſets out with a fixed principle, which applies to all the parts of the detail, while they reflect on it, both illuſtration and confirmation, be entitled to be conſidered as a ſcience, the reader is deſidered to conſider, how far that criterion will apply to this doctrine. The pedantry of mathematicians has contributed as much to bring their ſcience into diſgrace, as any other circumſtance, particularly in allowing no ſort of probation, but that which is made out by lines and diagrams; while, except the elements of that ſcience, every application of that department of knowledge has led to as many falſe concluſions as any other. If they will not allow the proof, that ariſes from our feelings, compared with thoſe of all men, whoſe organs of ſenſe are not deranged, what will they make of their own axioms? They muſt admit of other probation; while human reaſon holds its reign, truth and falſhood will be diſcriminated, without regard to ſuch empty and uſeleſs prepoſſeſſions.

CHAP. XII.

As the Action of all the other Powers, that act upon living Bodies, is the ſame, that that of the Remedies is alſo the ſame.

CCCXII. AS it is found certain, and proved, that the common effect of all the exciting powers is preciſely the ſame, to wit, the production of the phœnomena peculiar to life, that is, that ſenſe, motion, intellectual operation, and paſſion and emotion, are the ſame; for what elſe is the effect of heat, of food, of ſeaſoned food, of drink, of the blood, of the colourleſs fluids ſecreted from it, and of the air, among external bodies; what elſe in the functions of the living body itſelf, is the effect of muſcular contraction, of thought, of the paſſions, and of ſenſation, but to excite, preſerve, and continue as the ſuſtaining cauſe of thoſe functions in common to animals? And, as it is from that evident, that the operation of all the ſame powers is alſo the ſame; (for it muſt be granted, that the ſame cauſe, by an univerſal law in nature, tends to the ſame effect:)

effect (*a*):) and further, as the operation *betwixt cauſe and effect* depends upon ſtimulating (*b*), and that ſtimulus produces all the phœnomena of life, health, diſeaſe, and thoſe intermediate degrees between both, which are called prediſpoſitions (*c*); from theſe certain and demonſtrated facts it follows, and muſt be admitted, that the operation of the remedies, both in ſthenic and aſthenic diſeaſes, is the ſame. For, if there is no difference betwixt health and ſthenic diſeaſes, except an exceſs of excitement in the latter, and none betwixt the former and aſthenic diſeaſes, but deficient excitement in theſe laſt, what elſe can the operation of the remedies, to remove ſthenic diſeaſes be, but to diminiſh, and of thoſe that remove the aſthenic, but to encreaſe the excitement (*d*).

CCCXIII. Whatever thing produces the ſame effect as another, or ſeveral things, it muſt be the ſame thing as each of them, each of them the ſame thing as it, and every individual of them the ſame thing as every other individual.

(*a*) See par. XX. with the annexed note.
(*b*) See XIX. and XXII.
(*c*) See XXIII.
(*d*) See LXXXVIII.

ζ. In ſthenic diſeaſes, bleeding (*e*), vomiting, and purging (*f*), ſweating, abſtinence (*g*), reſt of body and mind (*h*), tranquillity with reſpect to paſſion, *all thoſe* reſtore health by nothing elſe but a diminution of excitement.

CCCXIV. In aſthenic diſeaſes, the adminiſtration firſt of diffuſible ſtimulants, for the purpoſes of gradually bringing back the appetite for the greateſt remedy, food, as well as keeping the food upon the ſtomach, and of aſſiſting in the digeſtion of it (*i*), then the application of heat (*k*), then the uſe of the leſs diffuſible and more durable ſtimulants, as animal food, without and with ſeaſoning, wine, geſtation, gentle exerciſe (*l*), moderate ſleep, pure air, exertion of mind, exertion in paſſion and emotion, an agreeable exerciſe of the ſenſes, all thoſe reproduce health, by no other operation, but that of only encreaſing excitement.

(*e*) See CCLXXXI.
(*f*) See CCLXXXIII.
(*g*) See CCLXXXIV.
(*h*) See CCLXXXV.
(*i*) See CCXCIV. to CCCII.
(*k*) See CCCII.
(*l*) See CCCII. CCCIII.

CHAP. XIII.

That all the Powers, which ſupport any Sort of Life, or the fundamental Principle of Agriculture, are the ſame.

CCCXV. AGAIN, are not the powers, which produce perfect health, the ſame as thoſe, which, by an exceſs of force, produce ſthenic diſeaſes; by a deficiency of force, aſthenic, as well as the prediſpoſitions to both, are they not the ſame, with no other variation but that of degree (*a*)?

CCCXVI. Further, as we learn from the whole doctrine delivered above, the hurtful exciting powers, which produce ſthenic diſeaſes, are the remedies of aſthenic; and thoſe which produce the latter, are the remedies of the former (*b*).

CCCXVII. All the powers, therefore, that ſupport any ſtate of life, are the ſame in kind, only varying in degree; and the propoſition is true, of every ſort of life, to its full extent over the animal creation.

(*a*) See XXIII. LXXIII.

(*b*) See LXXXIX. XC. XCI. XCIII. XCIV.

Such is the life of animals (*c*). Concerning which, all that has been ſaid applies to the life of vegetables.

CCCXVIII. Accordingly, as animals, in every ſtate of life, have their exciting powers (*d*) in prediſpoſitions and diſeaſes, their hurtful exciting powers (*e*) in the cure of both thoſe, their indications, and remedies adapted to each (*f*); all that, in every reſpect, is preciſely the caſe in plants.

CCCXIX. The powers that ſupport plants, in every ſtate of life, are heat, air, moiſture, light, ſome motion, and their internal juices.

CCCXX. The action of plants alſo conſiſts in ſtimulus (*g*); by means of which, the phœnomena peculiar to that ſort of life, ſenſe, ſome motion, and verdure, are excited: and the cauſe of this ſtate is excitement, an effect in common to all exciting powers (*h*).

CCCXXI. Nay, in this caſe too the exciting powers, when applied in due proportion,

(*c*) See from X. to XIII. incluſive.

(*d*) See LXII. LXVII. LXVIII. LXIX. LXXIII. CXII. to an CXLVII.

(*e*) See the ſame.

(*f*) See LXXXVIII. LXXXIX. XC. XCI.

(*g*) See XVII. XIX. and notes.

(*h*) See Part I. Chap. II.

produce

produce health; but their too great or too ſparing *action* occaſions diſeaſes, or prediſpoſition to diſeaſes; of which the former depend on an exceſſive, the latter upon a deficiency of ſtimulus. Accordingly, exceſs or ſcantineſs of moiſture, exceſſive heat or cold, by an equality of *hurtful* operation, lead to diſeaſe and death, indirectly or directly. And, as the rays of the ſun or darkneſs, when their operation is either too great, or too long continued, prove debilitating, the former indirectly, the latter directly; ſo the alternate ſucceſſion of night to day, of darkneſs to night, ſeems to be the effect of an intention in nature, to prevent too great an effulgence of the light of day, or too long a continuance of it, from ſtimulating either in exceſs or in ultimate exceſs, and thereby inducing ſthenic diſeaſes, or thoſe of indirect debility; or to prevent an exceſs, or long continuance of darkneſs from producing direct debility, and the diſeaſes peculiar to it (*i*).

(*i*) Chap. IV. We have no leſs proof, than that of the univerſal feeling of mankind, of the truth of what has been advanced, with reſpect to the ſtimulus of light and the debilitating effect of darkneſs.

CCCXXII. Nor do plants want their excitability, which, equally as in animals, "is "not different in different parts of its ſeat; "nor is it made up of parts, but one uniform, undivided, property over the whole "ſyſtem (*k*)." The effect of which is, that, to whatever part of a plant any exciting power is applied, its operation, whether in exceſs, in due proportion, or in under-proportion, immediately affects the excitability over the whole.

CCCXXIII. This effect is alſo produced with the ſame inequality as in animals, being, for inſtance, greater in any part to which its exciting power is directly applied, than in any other equal part. And, as there are two reaſons for that fact in animals, the direct impreſſion of the power upon the part more affected, and a greater energy of the excitability of *a part or relation to which it is ſo applied*, than on that of any other equal part (*l*); the very ſame is the fact with reſpect to plants. Further, as the excitability bears a greater relation to the impreſſion of the *exciting* powers, on the brain, the ſtomach, and inteſtines, than on any of moſt of the

(*k*) See Part I. Chap. IV.

(*l*) See XLIX. and addiiion L. LI.

other

other parts; ſo the part in plants, that correſponds to theſe parts, is the root, which is affected in the higheſt degree by the exciting powers. It is the root of plants, in preference to any of their other parts, to which the conflux of moiſture is made. The heat there is the beſt, which is neither exceſſive, and therefore liable to produce ſthenic affection, nor ultimately exceſſive, and therefore ready to induce indirect debility (both which diſadvantages are prevented by the depth *of the ground*); nor deficient, or what is called cold, which would bring on direct debility (*m*).

CCCXXIV. But the only uſe of the ſoil, through the pores of which the powers that

(*m*) Hence it would appear, that it ſhould be a general rule in ploughing and harrowing to adapt the depth, where the ſeed is to be laid, to the ſtate of the ſurrounding temperature. It would ſeem, when other circumſtances are equal, that the ſeeds of plants may more ſafely lye ſuperficially in warm than in cold countries. The ſame fact ſeems to be favoured by the difference of perfection that planted and natural woods attain in cold countries; the former, the ſeeds of which are lodged in a certain depth, turning to better account than the latter, which riſe from ſeeds that have randomly been ſcattered upon the ſurface. Might not the hills in the weſt of Scotland, upon ſome ſuch principle, be made uſeful oak foreſts?

have been mentioned penetrate, is to furniſh that ſort of a ſtrainer, by which the powers may neither, from the pores being too patalous, go down in too great quantity, and produce firſt a ſthenic, or too luxuriant a ſtate of the plant, and then indirect debility; nor, from the contractedneſs of the pores, be inſufficiently admitted to the root, and occaſion indirect debility, or the decaying ſtate of a plant. But that the ſoil is not otherwiſe neceſſary to the *production of* ſome *degree of* vegetable life, is proved by plants often living, to a certain degree, in pure water. That, however, it is uſeful as a filter, is proved by the good effect of ploughing, of breaking the clods, of dividing the tough clay by lime and other abſorbent earths, and by theſe means relaxing the pores: *On the other hand, we have proof of the ſame thing* in the ſucceſs of contracting the pores by making ground, *naturally* too friable, more tenacious with dung, and covering light ground with rags and ſtones, and thereby keeping in both heat and moiſture.

CCCXXV. From this *view of the facts*, the reaſon is evident, why every ſandy as well as clay ſoil, when the former has not received, and the latter parted with its toughneſs, is bar-

ren and unfruitful. Hence it is, that very hot ſummers and countries are hurtful to clay grounds, by ſhutting up the pores; and ſerviceable to friable and lean grounds, by diminiſhing their poroſity: Hence, dry ſeaſons are ſuitable to low-lying rich grounds, which, from all quarters, conduct a quantity of moiſture around the roots of the plants; while rainy ſeaſons are thoſe that anſwer in grounds that are high and of a thin ſoil. Declivities facing the north, which are commonly of a thin and poor ſoil, are cheriſhed and protected by hedges and clumps of trees, and a great number of bare ſtones, covering every thing, which ſome perſons, of more induſtry than ſenſe, often remove with hurtful effect; their good effect being to give heat and keep in moiſture. But in thoſe places, the declivity of which looks towards the ſouth, there is not equal occaſion for ſuch *protection from cold* and dryneſs, as they, from their more happy ſituation, are cheriſhed by the ſun, defended from the cold winds, and expoſed to thoſe which blow from the ſouthern points that are ſeldom too dry (*n*).

CCCXXVI. To

(*n*) While the northern winds, that is, the wind due north, and all the intermediate ones in every point of the compaſs

CCCXXVI. To return, *from this digression on agriculture*, to our proper ſubject; from what has been ſaid upon the cultivation and nature of plants, we learn, that their life is ſimilar to that of animals; that every thing vital in nature is governed by excitment, which the exciting powers only afford; that there is in no living ſyſtem, whether *of the* animal or vegetable *kind*, any inherent power neceſſary to the preſervation of life; that the ſame powers which form life at firſt, and afterwards ſupport it, have at laſt a tendency to produce its diſſolution; that life, the prolongation of life, its decay and death, are *all ſtates* equally natural; that every living ſyſtem lives in that which it procreates; that the generations of animals and vegetables are in that way renewed, that *the ſyſtem of* nature remains, and maintains an eternal vigour; in

compaſs from due eaſt to due weſt, are cold and dry, and commonly of a tendency to bring ſnow; the ſouthern, or the winds that blow from any point of the compaſs towards the ſouth, from the ſame points of due eaſt to due weſt, are as commonly warm and moiſt, and often productive of mild fertilizing rains.

one

one word, that all the phœnomena of nature are fabricated by one ſingle organ (*o*).

There are many circumſtances that give reaſon to believe, that this globe has undergone great changes, and that whatever is now ſea, has been land; whatever is land at preſent, has been ſea; and that the foſſil *kingdom of nature* has not been more retentive of the reſpective form of each of its individuals. But whether the laſt, like animals and plants, have a ſort of life, ſo as, after their manner, to be produced into living exiſtence, to grow, to run through a period equally without growth and diminution of bulk, to decay, to die, and, in death, loſe their proper form; the great duration of their age, and the ſhortneſs of ours, deprive us of any poſſibility of learning.

CCCXXVII. As all the motions of the planets, which latter were formed to remain and continue their courſes for ever, depend upon this one principle, to proceed ſtraight onward, according to the manner in which all

(*o*) No diſcovery, of any importance or extent over nature, has yet been made, that does not warrant, as far as the ſmallneſs of the number of ſuch diſcoveries go, the truth of this aſſertion. See the Introduction to my Obſervations.

projectiles

projectiles move, and then by the influence of gravity, which affects them all, to be pulled downward, and thereby, upon the whole, thrown all into circular motions; ſo, in the leſſer and living bodies, with which thoſe greater bodies are filled, that is, animals and plants, of which the whole ſpecies remain, though the individuals of each ſpecies die; whatever is the cauſe of their functions, whatever gives commencement and perfection to theſe, the ſame weakens, and, at laſt, extinguiſhes them. It is not, therefore, true, that ſome powers are contrived by nature for *the preſervation of* life and health, others to bring on diſeaſes and death. The tendency of them all is indeed to ſupport life, but in a forced way, and then to bring on death, but by a ſpontaneous operation.

PART

PART THE THIRD.

OF GENERAL DISEASES.

THE FIRST FORM, OR STHENIC DISEASES.

CHAP. XV.

CCCXXVIII. IN every ſthenia, in all ſthenic diſeaſes, in the whole firſt form of diſeaſes (*a*), an univerſal criterion is encreaſed excitement over the whole ſyſtem, evidenced, during the prediſpoſition, by an encreaſe of the functions of body and mind (*b*), and demonſtrable, after the arrival of diſeaſe, by an encreaſe of ſome of the functions, a diſturbance of others, and a diminution of others; in ſuch ſort, that the *two* latter are eaſily perceived to ariſe from the hurtful powers that produce the former, and to depend upon their cauſe.

(*a*) See above par. LXIX. LXXXVIII. CXLVIII. CLI. CCLI. Chap. IX.

(*b*) See par. CLI. throughout.

cauſe. As by that common band of union the diſeaſes of this form are connected together; ſo

CCCXXIX. There are certain circumſtances, by which they are diſtinguiſhed by *a difference* of their degree: for, there are ſome ſthenic diſeaſes, accompanied with pyrexia (*c*) and the inflammation of ſome external part; there are others without the latter of theſe, and others without both.

CCCXXX. The general ſthenic diſeaſes, with pyrexia and inflammation, are ſome of them called phlegmaſiæ, others exanthemata. But they will all, without diſtinction, be treated *here* according to their rank in excitement, from the higheſt to the loweſt degree of excitement.

CCCXXXI. The phlegmaſiæ and exanthematic diſeaſes have the following ſymptoms in common to them. The firſt of theſe is that degree of ſthenic diatheſis, that diſtinguiſhes prediſpoſition (*d*). This *diatheſis upon the*

(*c*) See par. LXVIII. and the ſubjoined note, for the meaning of pyrexia, which will be juſt now repeated.

(*d*) From the firſt deviation from perfect health to the commencement of actual ſthenic diſeaſe, the ſthenic diatheſis takes place in an encreaſing ſcale from 40° to 55°.

formation

formation of the diſeaſe, is ſucceeded by ſhivering, a ſenſe of cold, languor, and *a certain feeling like that which we have in fatigue from labour, called by phyſicians* laſſitude. The pulſe at firſt, *in every caſe,* and in mild ones through their whole courſe, is moderately frequent, and, *at the ſame time,* ſtrong and hard: The ſkin is dry, and there is a retention of other excretions (*e*): The urine is red; there is great heat and often thirſt.

CCCXXXII. The ſymptoms peculiar to the phlegmaſiæ (*f*), are an inflammation of an external part, or an affection nearly allied to it; while the general affection, for the moſt part, precedes this local one, and never ſuc-

(*e*) Such as that by the belly, and that which pours out the ſaliva and mucous, and forms the matter of expectoration.

(*f*) The phlegmaſiæ are ſthenic diſeaſes, accompanied with inflammation in an external part, as has been ſaid ſomewhere before, according to the definition of noſologiſts. But, as there is no difference betwixt them and ſynocha or the catarrh, which latter are unaccompanied with inflammation, we therefore pay no regard to the diſtinction; and ſhall regard nothing either in theſe or any other diſeaſes, but what is conſtituted by a real difference of excitement. It is the excitement by which we are to be guided through our whole diſtribution of diſeaſes.

ceeds

ceeds to it (g). This general affection, for the greater convenience of diſtinguiſhing it from

(g) Long before any part of this doctrine was diſcovered, when I was in ſearch of certain facts reſpecting peripneumony and pleuritis, I diſcovered one which I was not looking for, of more importance than all the reſt put together. It had been aſſerted, by moſt ſyſtematics and all the noſologiſts, that the primary ſymptom in the phlegmaſiæ was the inflammation of a part, I ſaw that was not true with reſpect to rheumatiſm, in which the general affection or pyrexia often rages one, two, or three days before the ſign of inflammation, pain, is perceived in any of the joints. I could alſo diſcern, that from the moment the pain and inflammation appeared in eryſipelas, or the roſe, there was alſo the general affection equally conſpicuous. In ſhort, in no one of that ſet of diſeaſes, did the fact appear that the inflammation was primary, and the pyrexia, or affection of the whole ſyſtem dependent upon it. But as peripneumony was ſaid in Edinburgh to be an exception, the detection I made equally diſproved that in all the works of Morgagni, where peripneumony and eryſipelas are treated, and in all thoſe of Trillerus, a profeſſed writer on that ſubject, and in a theſis in Sandiforth's Theſaurus, taken from no leſs than 400 caſes of that diſeaſe (for they are now by others, as well as me, conſidered as one), I found that in ſomewhat more than one-half of the given number, which was very reſpectable, the general affection appeared from one to three days before the pain came on, and in all the reſt of the caſes that, though for any thing theſe authors ſaid to the contrary, they might ſometimes have come on together, yet

from fevers, is to be denominated pyrexia (*h*). In the exanthematic ſthenic diſeaſes, an eruption of ſpots or puſtles, more or leſs crowded, according to the degree of the diatheſis, covers and diverſifies the ſkin. *The eruption appears upon the occaſion* of a foreign, contagious, matter having been taken into the body, and detained below the cuticle.

CCCXXXIII. The explanation of all thoſe ſymptoms eaſily flows from the doctrine delivered above. The ſthenic diatheſis in the manner, that has been ſo fully explained (*i*) precedes. The characteriſtics of the pulſe are never to be referred to the affection of a part, having been demonſtrated to ariſe from the diatheſis (*k*).

yet there was not one, in which it could be fairly alledged, that the pain was the firſt and primary appearance. Hence I found, that all the theories raiſed upon that hypotheſis of courſe fell to the ground. Indeed the fact is quite conſiſtent with every one here.

(*h*) Of this deſignation warning has been given more than once. See note at CCCXXIX.

(*i*) See above all the paragraphs, where the operation of the powers producing ſthenic diatheſis, are accounted for.

(*k*) See alſo par. CLV. and CLVI. and particularly CLXXIV.

CCCXXXIV. The frequency of the pulſe in ſthenic diſeaſes is moderate, becauſe, while the ſtimulus in the ſyſtem cannot fail to produce ſome *frequency*, the quantity *of blood*, to be thrown into quick motion, ſets bounds to it and prevents its riſing to quickneſs. But, *at the ſame time*, it is evident, that a quantity *ſo great* cannot be tranſmitted with the ſame celerity, as an under proportion (*l*). The ſtrength of the pulſe is occaſioned by the degree of excitement in the moving fibres of the veſſels, which is commonly called their tone, and by that of their denſity conſidered as ſimple ſolids (*m*). The hardneſs of the ſthenic

(*l*) In, fevers and other aſthenic diſeaſes of great debility, from the weakneſs of the ſtomach and other digeſtive organs, and the ſmall quantity of nutrient matter taken in, the quantity of blood which is diminiſhed in every one of thoſe diſeaſes, cannot be more than one-third leſs than that which overfils the veſſels in ſthenic diſeaſes. Conſequently, by a given power, it may be propelled in the ſame proportion, that is, one-third faſter than in the ſthenic diſeaſes, which alſo appears in fact; for while 100 beats in a minute is a frequent pulſe in ſthenic diſeaſes, till their approach or actual converſion to indirect debility, the common frequency in fevers and the other high aſthenic diſeaſes, is 150 beats in the ſame time.

(*m*) See above LIX. LX. and LXI.

pulſe

pulſe is nothing elſe, than the continuance for ſome time of each ſtrong contraction, cloſely embracing a great column of blood, and, thereby, as it were, reſembling a ſtretched rope (*n*).

CCCXXXV. That this is the exact ſtate of the arteries is proved by the great quantity

(*n*) See par. CLV. If it ſhould be alledged, that, though in fevers and the other caſes mentioned juſt now in the note (*a*), the deficient quantity of blood to be put in motion will account for the greater celerity of motion, than in the diſeaſes which make the preſent ſubject; ſtill the great weakneſs of the heart, for want of the ſtimulus of a due quantity of blood, as well as of many others, ſhould overbalance the effect ariſing from the ſmall quantity to be moved. But the anſwer to that objection is eaſy. It ariſes from the explanation of the ſtrength and hardneſs of the pulſe juſt now mentioned in the text. The febrile pulſe is indeed one-third quicker than the ſthenic pyrexial, but it is weak, and ſmall, and ſoft, while the other is ſtrong, and full, and hard. An equal force then of the heart to that in the ſthenic caſe is not required to account for the difference of the effect. A third leſs of blood, with an equal force behind, will be driven not only one-third faſter, but with ſtrength and hardneſs. The want of theſe two laſt then is to be ſet to the account of the heart's greater weakneſs. Though the blood then be driven one-third quicker, yet the impulſe communicated upon the whole is one-third leſs, as the characteriſtics of both kinds of pulſe readily explain to us.

 of

of food taken with a good appetite, before the arrival of the diſeaſe, and during the period of prediſpoſition; it is proved by the ſame and other powers, giving an unuſually great excitement over the whole ſyſtem (*o*), and, therefore, among *their* other effects encreaſing the digeſtive energy; and it is proved by evacuant, with other debilitating remedies, both preventing and removing the diſeaſes. The confounding, therefore, this ſtate with one diametrically oppoſite (*p*), which has hitherto been an univerſal practice, was a very capital blunder, and could not miſs of producing the worſt conſequences, by equally perverting the theories and actual practice of the art.

CCCXXXVI. The ſhivering and ſenſe of cold depend for their cauſe upon the dryneſs of the ſkin. The languor and feeling of laſſitude point out a higher degree of excitement

(*o*) See the whole of the firſt Chapter of Part II. upon the powers producing ſthenic diatheſis.

(*p*) Which authors and too many practitioners have univerſally done, in jumbling proper fevers with the preſent diſeaſes, under the vague and falſe denomination of febrile or feveriſh diſeaſes. In noſology the ſynochus is conjoined with typhus, the gangrenous ſore-throat, which is a typhus fever, with the common ſthenic inflammatory pyrexia.

in

in the brain and fibres of the mufcles, than can be conveniently borne by the excitability, confined within certain boundaries (*q*). They are therefore functions impaired from a ftimulant, not from a debilitating caufe (*r*).

CCCXXXVII. The drynefs of the fkin is occafioned by the great excitement and denfity of the fibres that encircle the extreme veffels, diminifhing their diameters to fuch a degree, that the imperceptible vapour of perfpiration cannot be taken into them, or, if taken in, cannot be tranfmitted (*s*). This ftate is not fpafm, is not conftriction from cold, but a fthenic diathefis, fomewhat greater on the furface, than in any other part. The ftimulant energy of heat, efpecially after the application of cold, which is otherwife a powerful exciting caufe of fthenic difeafes, is applied to this part with more force than to any of the interior parts, and encreafes the fum total of ftimulant operation (*t*).

(*q*) See above CLIV.

(*r*) See above par. CLXVI.

(*s*) See LXIX. and CXIII.

(*t*) See XXXVII. 6. and CXIII. juft now quoted.

CCCXXXVIII. The ſame, in general, is the cauſe of the temporary retention of the other excretions (*u*); only that the operation of heat, juſt now mentioned (*x*), is foreign from the preſent explanation; and on that account, the diatheſis, that affects the interior veſſels, is more gentle. Theſe veſſels, for that reaſon, and becauſe they are naturally of a larger diameter, are ſooner relaxed in theſe diſeaſes, than the pores upon the ſkin (*y*).

CCCXXXIX. The redneſs of the urine is owing to the general diatheſis affecting the veſſels that ſecrete it, and proving an obſtacle to the ſecretion (*z*). Hence ariſes the ſtraining of the fluid to be ſecreted to diſtend the ſmall veſſels (*a*), and the counter-ſtraining of the

(*u*) See CCCXXXI. and note (*d*); and alſo the par. CLIX. CLX. CLXIII.

(*x*) in the CCCXXXVII. and the reaſon is, that heat being ſtationary in the interior parts, has not that force which it has upon the external ſurface. See above par. CXIII.

(*y*) It is reaſonable to think, that veſſels, which pour out a watery fluid, have a larger diameter than thoſe, which, like the perſpiratory, even in their healthy ſtate, only tranſmit an imperceptible vapour.

(*z*) See par. CLXIII.

(*a*) Or tubuli uriniferi.

moving

moving fibres, by their contractions, to diminish the cavities which the distention increases; and, in so far as they perform the function of simple fibres, to resist the distention. But, as, in this forcible action of the vessels, the cohesive force of all the simple solids yields somewhat, *the effect comes to be* the transmission of some particles of blood. This transmission happens not at first, because the distension does not suddenly, but after some time, overpower the cohesion of the mass of simple solids.

CCCXL. The cause of the great heat is the interruption of the perspiration, preventing the heat generated in the inner parts of the system to pass off by the skin (*b*).

CCCXLI. The thirst is occasioned by the sthenic diathesis, closing up the excretory vessels of the throat, and *there* opposing the excretion of the *peculiar* fluid (*c*). And the heat, by dissipating what fluid is excreted, contributes to the effect:

(*b*) The rest is erased.

(*c*) See par. CLIX.

CCCXLII. The inflammation and affection nearly allied to it (*d*), whether of a catarrhal or of any other nature, is a part of the ſthenic diatheſis, greater in the affected, than any other equal, part *of the ſyſtem* (*e*): Which is manifeſted by the exciting powers, alſo in this caſe acting upon the whole ſyſtem, by the ſymptoms of the diſeaſes ſhowing an affection in common to the whole, and by the remedies driving that affection, *not from the inflamed part only*, but from the whole ſyſtem (*f*).

CCCXLIII. The general affection, for the moſt part, precedes that confined to one part, or is ſunchronous with it, never comes after it, becauſe its cauſe, the exceſſive excitement (*g*), producing the diatheſis, exiſts before the diſeaſe itſelf (*h*); and, though it forms the rudiments of the affection of the part during the prediſpoſition (*i*), yet it does not, *at that time*, form that affection itſelf, and not al-

(*d*) mentioned above in par. CCCXXXII.
(*e*) CLXVIII. CLXIX. CLXX. CLXXI.
(*f*) LXXXIX. See alſo part firſt, Chap. IV.
(*g*) See LXII. LXIX.
(*h*) See CLXXIV.
(*i*) See above CLXIX.

ways even during the diseafe, but only in a certain high degree both of the diseafe and of the particular affection itself (*k*). Hence, when the diathesis is great, the affection of the part is in proportion (*l*), and slight under a lesser degree of the diathesis (*m*); while in a moderate and gentle diathesis it does not happen at all (*n*), and for this reason, that a high degree of diathesis is necessary to the formation of it. Thus in peripneumony, where the diathesis is the greatest, and in rheumatism, where it is next *in greatness*, the inflammation is found proportionably great (*o*). And even in the measles, the danger of which turns entirely

(*k*) See above CLXVIII. *n*.

(*l*) as in peripneumony and rheumatism, inflammatory sore throat, and mild erysipelas, sore throat.

(*m*) as in the sthenic.

(*n*) As in synocha, or the common inflammatory fever and catarrh.

(*o*) This proposition does not go so far as to assert, that there may not be a sthenic disease, without any actual inflammation, but with an affection of a part nearly allied to it, which depends upon an equal high diathesis as either peripneumony or rheumatism, and even higher than the latter. Such we find, as I have formerly said (CLVII. and CLVIII.) in phrenitis. But the meaning is, that the inflammation, when it does happen, is always in proportion to the degree of diathesis.

upon the degree of ſthenic diatheſis, the danger of inflammation is equal, by which, and often in a high degree, the lungs themſelves are affected. Synocha is never phrenitic, but when a great diatheſis occurs, threatening the brain with inflammation, or the danger of it. Nor is there any danger to be apprehended in eryſipelas (*p*), even when *its inflammation* affects the face, but when the pyrexia is violent. And the mildneſs of the diatheſis enſures a good termination. Simple ſynocha is nothing elſe but a phlegmaſia, conſiſting of a pyrexia and diatheſis, inadequate, upon account of their ſmall degree, to the production of inflammation. Yet, as all the hurtful powers producing it, and all its remedies are preciſely the ſame, with thoſe of any phlegmaſia; the ſeparating it from them, and uniting it with fevers, which are diſeaſes of extreme debility, was an unpardonable blunder (*q*); and ſo much the more ſo, that inflammation, which was falſely ſuppoſed eſſential to the nature of the phleg-

(*p*) or the roſe, or St. Antony's fire.

(*q*) This has been more than once hinted at, and once a little above. The Noſologiſts have excluded ſynocha from their order of phlegmaſiæ, becauſe forſooth, though it

phlegmasiæ, does take place in it, as often as the diathesis, necessary to produce it, is present (*r*). Yet this fact, upon account of another blunder, neither of a slighter nature, nor of less hurtful consequence, that of supposing inflammation the cause of the phlegmasiæ, could not be discerned. In fine, to remove all doubt of inflammation being compatible with the nature of catarrh, but commonly not taking place in it, upon account of the moderate general diathesis, upon which it usually depends; even in it, as often as the diathesis rises high, which sometimes happens, when the proper plan of cure for it has been neglected, and the effect of the exciting hurtful powers has been carried to excess, an inflammation, and a formidable one

it was in every other respect the same, it wanted the inflammation of a part, and they united it with proper fevers, though in the powers producing it, in its proper cause, and in the remedies that remove it, it was in every respect diametrically opposite to those diseases. But their rule of judging was different from ours.

(*r*) What is a peripneumony, a rheumatism, or any phlegmasia, but a synocha, with a diathesis sufficient to produce inflammation.

indeed,

indeed, arises, often affecting the throat (s), and sometimes the lungs, and producing *there* an affection rising to all the rage of a peripneumony.

CCCXLIV. It is in vain to talk of a thorn thrust under the nail, wounding it, superinducing inflammation upon the wound, and spreading a similar affection *along the arm* to the shoulder, and a pyrexia over the whole body, as an illustration and proof of the manner, in which the phlegmasiæ arise from inflammation. For nothing like a phlegmasia follows this, or any similar affection of a part, unless the *sthenic* diathesis previously happens to have taken place, and is now upon the eve of spontaneously breaking out into some one or other of its respective diseases. But, without that diathesis, no general affection takes place, and if an opposite diathesis be present *when such an accident happens*, an opposite general affection will be the consequence, to wit, a typhus fever, arising as a symptom of gangrene (*t*), and dangerous to life.

CCCXLV. That

(*s*) When that happens it is still commonly a mild disease, as will be shewn by and by.

(*t*) It is with much regret, that I should have had occasion to observe the bad, and too often fatal, consequence

of

CCCXLV. That the affection of the part depends upon the general affection is proved by the frequent occurrence of inflammation, without being followed by any phlegmafia. Which happens, as in the cafe juft now mentioned, as often as the general diathefis is abfent, or the inflamed part is not an internal one and of high fenfibility (*u*). Accordingly, all the examples of phlegmone, all thofe of erythema or eryfipelas, without general diathefis (*x*), are foreign from the phlegmafiæ, abfurdly

of treating fuch local affections, without difcrimination of the habit with which they may coincide. The difeafe is treated by evacuation and ftarving, even in habits the moft weakened, and drink is witheld from perfons even the moft accuftomed to it. The difeafe increafes, and as if that, were for want of more fuch treatment, the fame treatment is perfevered in till death clofes the fcene.

(*u*) See above CLXXI.

(*x*) See alfo par. LXXXI. The Nofologifts, under their genius of phlegmone which in one of them is divided into two fpecies, proper phlegmone, and erythma, have raked together a number of local, and moft of them infignificant affections, which they have confidered as laying the foundation of their phlegmafiæ, or general fthenic difeafes with an inflammation in a part. But will any man in his fenfes fee any connection betwixt chill-blanes, which is one of them, or anthrax, which is a local fymptom of the plague, or the flight inflammation upon the eye, called

absurdly conjoined with them, and more absurdly still considered as their protoypes; being *in fact* all only local affections, or symptoms of other diseases. This conclusion is not weakened by a certain resemblance of diseases with inflammation in an internal part to the phlegmasiæ; these diseases being neither preceded by the usual hurtful powers, that produce either the phlegmasiæ, or any general disease whatever, nor cured by the usual remedies of the latter. It was, therefore, a very bad mistake, and of most hurtful consequence to the practice of cure, to enumerate among the phlegmasiæ those diseases, that

called a stie, or the inflammation in the groins of children from their being scalded by their urine, or the bites of insects, the effects of which are confined to the bit part; will he see any connection betwixt these and a peripneumony; which arises from hurtful powers affecting the whole system, and no part in particular; and is cured by remedies that affect the whole system, and the inflamed part not more, nor even so much as many others? All these, however, have been made the prototypes of inflammation, by which they meant their phlegmasiæ; as if there were nothing to be regarded in them but the inflammation, which, in fact, is their most insignificant part, bearing no higher proportion to the sum of morbid state over the system than that of 6 to 3000, or even less. See above Part first, Chap. IV. and particularly par. L.

arise

arise from ſtimulants, acrids, and compreſſion, and are only curable by removing their local cauſe, which is ſeldom effected by art (*y*).

CCCXLVI. It is not without good reaſon, that the appellation of *pyrexia* has been given to the general affection, which appears in the

(*y*) See above par. LXXXI. Take for an example gaſtritis, which the Noſologiſts have made one of their phlegmaſiæ, and put upon the ſame footing with peripneumony and the other diſeaſes that may be admitted as phlegmaſiæ. That affection is an inflammation in a portion of the ſtomach, in conſequence of a ſolution of continuity from the previous ſwallowing of ground glaſs, ſmall fiſh bones, a quantity of Cayen pepper ; or ſymptomatic of a ſchirrous obſtruction and tumor. Theſe, not the ordinary hurtful ones that operate upon the whole ſyſtem, as in the true phlegmaſiæ, are the powers that induce that affection. It has no connection with the excitement, the affection of which is only an effect of the locally ſtimulating power, and of the ſenſibility of the ſtomach ; its true cauſe being the ſolution of continuity or obſtruction, keeping up the inflammation ; and its remedies ſuch, as are adapted to the removal of that local ſtate. It may happen to a ſound habit, where there is no diatheſis in any degree ; in which caſe it is purely local ; or it may accidentally coincide with either diatheſis ; in which caſe it is a combination. When the combination is with ſthenic diatheſis, debilitating evacuant remedies can only palliate, but they bring life into danger when the aſthenic diatheſis is preſent, which is 17 times out of 20 for the other.

phlegmasiæ and exanthemata; they being by it most advantageously distinguished on the one hand from fevers, which are diseases of debility in extreme, and on the other from a similar, but altogether different, affection, which is a symptom of local diseases (z), and may be called a *symptomatic pyrexia.*

CCCXLVII. The true sthenic diseases (*a*) accompanied, except one, with pyrexia (*b*) and external inflammation (*c*), are peripneumony, phrenitis, the small pox, the measles, as often as these two last are violent, the severe erysipelas, rheumatism, the mild erysipelas, and the cynanche tonsillaris. Those free of inflammation are catarrh, simple synocha, the scarlet fever, the small pox, the measles; when in the two latter cases, the eruption consists only in a few pustules.

(z) The general affection arising in the system from the effect of a thorn pushed under the nail (see par. CCCXLIV. and note), and that occurring in the gastritis, mentioned in the last paragraph of the text (see the note on that paragraph) are good examples of cases, to which the term symptomatic pyrexia should be applied.

(*a*) See above CCCXXIX.

(*b*) See par. CCCXXXII.

(*c*) See CLXVIII.

The

The Description of Peripneumony.

CCCXLVIII. The ſymptoms peculiar to peripneumony (*d*) (under which pleuriſy, and, as far as it is a general diſeaſe, carditis, are comprehended), are pain ſomewhere in the *region of* the cheſt, often changing its ſeat; difficult breathing; cough, for the moſt part bringing up an expectoration, and ſometimes a mixture of blood *in the matter of expectoration.*

CCCXLIX. The ſeat of the diſeaſe is the whole body, the whole nervous ſyſtem (*e*); which is proved by the diſeaſe being produced by an increaſe of the diatheſis, which took place in the prediſpoſition, and by no new

(*d*) The ſymptoms in common to it and the other diſeaſes of the ſame form, enumerated in the laſt paragraph, have been deſcribed in par. CCCXXXI. Theſe peculiarly diſtinguiſhing the phlegmaſiæ and exanthemata, that is the diſeaſes either accompanied with inflammation, or an approach to it, are deſcribed in par. CCCXXXII.

(*e*) See par. XLVII. XLVIII. XLIX. LIV. LV. and not the inflamed portion in the lungs, according to the common opinion.

circum-

circumſtance (*f*); by the inflammation within the cheſt, for the moſt part following the pyrexia at a conſiderable interval of time, and never preceding it (*g*), and by bleeding and other remedies of ſimilar operation, which affect not the inflamed part, more than any other equally diſtant *from the center of activity*, removing the diſeaſe. The proper ſeat of the inflammation, which is only a part of the general diatheſis, is the ſubſtance of the lungs, and a production of the pleura, covering their ſurface; or any part of that membrane, whether the part lining the ribs, or that containing, within the external ſurface of it, the thoracic viſcera, different in different caſes, and in the ſame caſe at different times.

CCCL. Pain, in ſome part of the cheſt, depends upon an inflammation of the corresponding internal parts juſt now mentioned (*h*), which is proved by diſſection; only that it is oftener occaſioned by an adheſion of the lungs to the pleura coſtalis, ſeldom to an

(*f*) See above LXXV. LXXVI.
(*g*) See above CCCXXXII. and the note (*b*).
(*h*) See above par. CLXXIV.

inflammation

inflammation of that membrane, *as we learn from the same evidence.*

CCCLI. When the inflammation takes place on the surface of the lungs, it is impossible it can be confined either to the substance of the lungs, or the membrane covering their surface. For how can any person suppose, that the points of the same vessels, either as distributed upon the membane, or as plunging into the substance of the lungs, or emerging from it, can alone be inflamed without *a communication of the affection* to the next points (*i*). The distinction, therefore,

(*i*) Yet one Nosologist, upon that very supposition, makes two orders of phlegmasiæ, one seated on the membrane, the other in the interior surface of each viscus. Into this error, he had been led, by observing, that, after death, the interior substance of the liver exhibited signs of previous inflammation. And, as other dissections showed the membrane upon other occasions to have been in a state of inflammation, he thence drew his rash conclusion. But it is to be observed, that the first mentioned state of the liver was not a phlegmasiæ at all, as it had not during life exhibited any of the symptoms of that disease, or even given any sign of the presence of inflammation. It is a case, then, we have nothing to do with upon this subject, even so far as it applies to the liver. But the extending the application to all the viscera, which he

therefore, of the inflammation *accompanying the phlegmaſiæ* into perenchy matoſe, or that affecting the ſubſtance of the viſcus, and into membranous; as well as the notion which makes the latter caſe univerſal, is equally remote from the truth. The reaſon of neither the membrane contiguous to the lungs, nor the ſubſtance of the latter, being always inflamed, but of the inflammation being ſometimes communicated to ſome part of the neighbouring membrane, is explained by the vicinity of the part inflamed *in the laſt caſe* to that which receives the air, and, therefore, varies in its temperature (*k*).

CCCLII. The

he was pleaſed to make the ſeats of ſome phlegmaſiæ or other, was looſeneſs of reaſoning, and careleſsneſs of matter of fact, in extreme. A gentleman, whoſe works have lately been buried, without any ſtruggle or ſigns of life, but that of a feeble unintelligible ſound from within the tomb, which no living reaſon could make any ſenſe of in their life time, took it into his head to maintain (for the ſake of ſeeming to differ with men of name and reputation, his higheſt ambition), that the inflammation in the phlegmaſiæ was always ſeated in the membrane: The anſwer to which is given in the text.

(*k*) So far is it from being true, that this ſort of inflammation can be confined to a few points of the affected veſſels (ſee the note here at (*i*), that in fact we find it, though

CCCLII. The pain often ſhifts its ſeat (*l*) in the courſe of the diſeaſe, becauſe its immediate cauſe, the inflammation, is equally liable to change, being diſpoſed to leave its firſt ſeat, or in part to remain in it, while in its greateſt part it ruſhes into another. Which is a fact proved by the compariſon of the known change of the pain with the traces of inflammation in the correſponding parts, diſcovered after death (*m*).

CCCLIII. This fact, added *to thoſe already produced, brings* another ſolid argument (*n*) in refutation of the opinion of the diſeaſe being produced or kept up by inflammation, or in any ſhape depending upon it; confirms that here advanced, and proves that the inflammation is regulated by a ſtrong general diatheſis, and directed by it ſometimes to one

though not ſo often as has been ſuppoſed, ſometimes in the mediaſtinum, ſometimes in the external membrane of the pericardium, ſometimes in the ſuperior membrane of the diaphragm. Boerhaave's notion of the tranſlation of inflammation from one viſcus to another, was an error in the oppoſite extreme.

(*l*) See above CCCXLVIII.

(*m*) Many ſuch are to be found in Morgagni, Bonnetus, and Liutod.

(*n*) See all that has been ſaid.

 part,

part, ſometimes to another; that, *as depending on that cauſe*, it increaſes, and is in a manner multiplied. And the ſame concluſion is confirmed by the inflammation abating, becoming more ſimple, and *at* laſt receding from every part it had occupied, in proportion to the progreſs of the cure in relieving or removing the diatheſis. The ſame fact is confirmed by the nature of rheumatiſm, the pains of which are ſeverer and greater in number, in proportion as the diatheſis runs higher; and milder and fewer in proportion to its gentleneſs. Theſe pains, that have their dependence upon the general diatheſis, *and are* a part of the general diſeaſe, ought to be diſtinguiſhed from local ones, which often occur, and may accidentally precede this diſeaſe (*o*).

CCCLIV. The difficult breathing is owing to no fault in the lungs, as an organ, to no defect of excitement in them, but to the air alone in inſpiration, by filling and diſtend-

(*o*) Stiches, as they are called, frequently happen from ſlight accidents, and may appear before the arrival of rheumatiſm, but they ſhould be diſtinguiſhed from the pains that ariſe from the diatheſis, conſtituting that diſeaſe; a diſtinction, that has ſeldom been attended to, for want of a right principle to lead to ſuch attention.

ing

ing its own, compreſſing the inflamed, veſſels.

CCCLV. The cauſe of the cough is a large ſecretion and excretion of the exhalable fluid, and mucus, irritating the air veſſels, encreaſing their excitement, as well as *that* of all the powers, that enlarge the cavity of the thorax; then ſuddenly ſuſpending it, and thus performing a full inſpiration, and a full expiration, partly in conjunction with the operation of the will (*p*).

CCCLVI. The cough is leſs or none at all at firſt; becauſe, on account of a ſtrong diatheſis occupying the extremities of the veſſels, the ſame fluids flow on in the form of an inſenſible vapour, are leſs irritating *in that form*, and diſmiſſed with leſs effort.

CCCLVII. *Again*, the cough is afterwards followed by expectoration; becauſe the accumulated fluids, with their effect, the effort of coughing, are carried forward in the rapid action of the air ruſhing out, as it were, in a torrent (*q*). And the mixture of blood with them point out the force of ſecretion formerly explained.

(*p*) See above CLX. and CLXI.

(*q*) See above par. CCXXXIX.

CCCLVIII. The ſoftneſs of the pulſe, commonly taken into the definition *of the diſeaſe* (*r*), has been here rejected, becauſe the characteriſtics of the pulſe do not follow the inflammation, but the general diatheſis (*s*). With reſpect to the diatheſis, *the proper language is, that* the pulſe, inſtead of ſoft, is leſs hard; and when the effect, *that the cure has produced upon the pulſe*, is conſidered, it may then be ſaid to be ſoft (*t*).

CCCLIX. Nor is the varying feeling of pain, which *is deſcribed as* ſometimes acute, and pungent, ſometimes obtuſe, gravitative, and rather to be conſidered as an uneaſineſs than pain, though immediately dependent upon the inflammation, to be conſidered as of any conſequence in pointing out the ſtate or ſeat of the inflammation: becauſe, however great the inflammation is, wherever it is ſeated, whatever danger it denounces, the only means of removing it, and of averting the danger, is

(*r*) at leaſt, when they called it peripneumony,

(*s*) See above CLV. CLXXIV.

(*t*) It is an univerſal effect of ſthenic diatheſis to render the pulſe hard in one degree or another. And peripneumony is not an exception from that fact. But the diſtinction aroſe from the miſtake of inflammation being the all, inſtead of an unimportant part of, the diſeaſe.

to

to remove the general diathesis. The notion, therefore, of the membrane being inflamed, when the pain is acute, and the interior substance, when it is obtuse, must be rejected as good for nothing, must be guarded against as destructive (*u*). For often, when the disease has arrived at an advanced stage, a sudden abatement of the pain taking place, without a proportional relief of the breathing, to an unskilful person gives an appearance of a re-return of health. But the cause of that, while it has nothing to do with the seat or sort of inflammation, is that degree of excitement, which shows, that the excitability is exhausted, the excitement come to an end, and that the vigour, before excessive, is now converted into direct or indirect debility (*x*). Hence arises in the vessels, especially the labouring vessels, in place of the excessive excitement, *with which they were before affected*, no excitement at all; and extreme laxity takes place of their

(*u*) See par. CCCLI. and the note under it at (*i*).

(*x*) The direct debility may be owing to the proper cure, which is directly debilitating, having been carried too far, or to the indirect debility arising in the course of the disease, seldom now to alexipharmac treatment. See above par. XLVII. and the subjoined notes.

 former

former denſity. Hence, inſtead of an excretion encreaſed by violence, an immenſe diſcharge takes place without force, without effort, *and merely* by the watery *part of the* fluid, from the inert ſtate of the veſſels, leaving the more conſiſtent; and a ſudden ſuffocation takes place, in conſequence of an effuſion of fluids from all quarters into the air veſſels.

CCCLX. The carditis, or inflammation of the heart, is a diſeaſe of rare occurrence, is ill underſtood, and for the moſt part a local affection. When the latter is the caſe, there is no uſe for the interference of a phyſician. And, if ever it be a general diſeaſe, it admits of no other definition or cure but thoſe of peripneumony. From peripneumony then, as it ariſes from the ſame antecedent hurtful powers, and is removed by the ſame remedies, it is not to be ſeparated.

The Deſcription of Phrenitis.

CCCLXI. Phrenitis is one of the phlegmaſiæ (*y*), with a ſlight inflammatory or ca-

(*y*) See above par. CCCXLVII.

tarrhal

tarrhal affection of some one, or more joints, or of the fauces, with head-ach, redness of the face and eyes, impatience of light and sound, watchfulness, and delirium.

CCCLXII. Inflammation, in its proper form, appears not in this case. And yet there is an approach to inflammatory state in the joints, in the muscles, and especially over the spine, or about the chest, or in the bottom of the throat; or *there is* a catarrhal state, which is an affection depending, *however*, upon the same cause, *as inflammation*, and only differing from it in being less.

CCCLXIII. The head-ach, and redness of the face and eyes, arise from an excessive quantity of blood in the vessels of the brain and its membranes, distending, stimulating in excess, exciting in excess, and contracting the vessels, to *a degree that gives* pain (*z*). To the production of which last inflammation is not necessary: independent of which, this excessive action is painful, because it exceeds that mediocrity in which agreeable sensation takes place (*a*). The redness both points out and

(*z*) See above CLVII. and CLVIII.

(*a*) See par. CLXXXII. CLXXXIII.

explains

explains the overproportion of blood. And that the overproportion gives pain by its diſtending operation, is ſhewn by the relief that bleeding and every thing that diminiſhes the quantity, and moderates the impetus of the blood, adminiſters.

CCCLXIV. It is the overabundance alſo that produces the impatience of light and ſound. For, as a certain impulſe of the blood is neceſſary to the exerciſe of every ſenſe, by whetting the organ of ſenſation (*b*); ſo, when the cauſe riſes to exceſs, an equal encreaſe of the effect muſt be the conſequence. But theſe *very* ſymptoms, with pain, ariſe in an oppoſite ſtate of excitement, to wit, the aſthenic.

CCCLXV. The vigilance and delirium are occaſioned by the ſame exceſs of excitement, produced by the exceſſive ſtimulus of the abundance of blood and of the other powers. Other hurtful powers, contributing their effect, are intenſe thinking, and a high commotion of paſſion. Excited by thoſe, no body,

(*b*) There is commonly in the organ where any nicety of ſenſe is to be exerciſed an extraordinary apparatus of blood veſſels. Blood flowing into theſe, encreaſes, by its heat and the ſtimulus of its motion, the ſenſe, to which it is ſubſervient.

even

even in health, ſleeps; and, therefore, the wonder is the leſs, that a high degree of them, and under the influence of a violent diſeaſe, ſhould repel ſleep. Both encreaſed watching and delirium are ſymptoms of diſturbance.

An Explanation of the Sthenic Exanthemata.

CCCLXVI. The ſthenic exanthemata, after the application of a contagious matter, and of the uſual hurtful powers which produce ſthenic diatheſis, appear firſt in the form of a ſthenic pyrexia, or ſynocha, and then, after a ſpace of time, not certain to a nicety, are are followed with ſmall or larger ſpots.

CCCLXVII. That the exanthematic ſthenic diſeaſes differ not from other ſthenic diſeaſes *not exanthematic*, in any circumſtance of conſequence, is proved by this ſtrong argument; that, except the eruption and the phœnomena peculiar to it, there is nothing in the ſymptoms, and except the contagion, there is nothing in the hurtful exciting powers, but what happens in any ſthenic diſeaſe; and the preventatives, as well as the remedies, are the ſame *in all*. While that is the ſtate of the fact, it was the height of abſurdity, *merely*

for the ſake of the eruption and its peculiar phœnomena, to ſeparate the exanthematic from their kindred diſeaſes, and to unite them with the moſt oppoſite diſeaſes both to them and to one another (*c*). For how, when the uſual

(*c*) The noſologiſts have ſeparated the exanthematic diſeaſes, real or imaginary, into a claſs or order by themſelves, which they have filled up with diſeaſes, of which there is not two, but the ſmall-pox and meaſles, that have any other connection, than their mere eruptive appearance, while they are ſeparated from others, with which, in every reſpect, they have the moſt eſſential connection. Thus the ſmall-pox and meaſles are taken from the natural place to which they are here reſtored. And it is unaccountable, that we ſhould have it to ſay, that even eryſipelas, which has ſurely no right even to the ſlim diſtinction of eruptive, has alſo been placed among them. Again, the plague, which is to all intents and purpoſes a typhus fever, its eruptive part not always disjoining it from that, is ſeparated from it, though it is ſo nearly the ſame, ſcarcely excepting degree, and conjoined with ſthenic diſeaſes of a diametrically oppoſite nature. And the gangrenous ſore-throat, which is alſo a typhus, has neither been placed among fevers, in its proper place, nor among the exanthemata; to which the effloreſcence, that it produces on the external ſurface, according to their own rules of arrangement, ſeemed better to entitle it than ſome others, eſpecially the eryſipelas. And it again (for there is no end of the confuſion of this pretended order of ſome phyſicians), is conjoined not only as a genus with ſthenic diſeaſes, but even as a ſpecies

uſual plan of cure removes the effect of the eruption, whatever that be, and thereby ſhows it to be the ſame, can any one imagine, that the cauſe ſhould be different, and not preciſely the ſame? unleſs we muſt again have to do with thoſe, who maintain, that the ſame effect may flow from different cauſes. Truly, the operation of contagion, in ſo far as it affects general diſeaſe, is not of an oppoſite nature to the general ſthenic operation, but preciſely the ſame.

CCCLXVIII. Contagion is a certain matter, imperceptible, of an unknown nature, and like moſt of the phœnomena of nature, only in any meaſure open to our enquiry in its evident effects. Taken from the body of one

ſpecies of one of thoſe genera. The truth is, that ſyſtematics, who were otherwiſe no noſologiſts, have made too much work about eruptive and contagious diſeaſes, and have never dived into the interior nature either of them or almoſt of any other. They have all followed each other from their firſt leader, and never once deigned to turn a glance of their eye upon the phœnomena of nature as theſe aroſe before them. Hippocrates miſled his followers, they miſled theirs from age to age, and they all miſled the poor noſologiſts. Who have laid on the cop-ſtone of the abſurdity of the art, and, having finiſhed the fabric of folly, left mankind, if they are not pleaſed with it, to look out at their leiſure for a better and more ſolid.

affected

affected with it, or from any groſs matter (ſuch as clothes or furniture, where it happens to have been lurking), and received into a ſound body, it ferments without any change of the ſolids or fluids, it fills all the veſſels, and then is gradually ejected by the pores.

CCCLXIX. And, as no effect, except ſthenic diatheſis, follows it, and the hurtful powers, that otherwiſe uſually produce that diatheſis, always precede it, and an aſthenic or debilitating plan of cure always, and only, ſucceeds *in removing it*, and conſequently its effect no ways differs from the diſeaſes hitherto mentioned; it is, therefore, with juſtice, that the diſeaſes ariſing from it, are conjoined with thoſe others, as belonging to the ſame form.

CCCLXX. Betwixt them there is only this difference, that in the exanthematic caſes of ſthenic diſeaſe, the matter requires ſome time to paſs out of the body, *which time is* different in different caſes; and it paſſes out more copiouſly or ſcantily, the more free or impeded the perſpiration is (*d*). But it is impeded by no ſpaſm, by no conſtriction from cold, and

(*d*) See above par. XXI. and LXXVI.

only

only by the prevalence of ſthenic diatheſis upon the ſurface of the body; as is evident from this fact, that cold, by its debilitating operation, procuring a free iſſue for the matter, clearly promotes the perſpiration (*e*). And that it produces this effect, by diminiſhing the diatheſis, not by removing a ſpaſm, has been demonſtrated formerly. As the iſſue of the matter is in this way promoted by *inducing* a free perſpiration; ſo

CCCLXXI. Whatever part of it is detained below the cuticle, by that delay, it acquires a certain acrimony, produces little inflammations, and conducts them, when produced, to ſuppuration. Theſe, by irritating the affected part, create a ſymptomatic pyrexia and ſymptomatic ſthenic diatheſis, which ſhould be diſtinguiſhed from the general *pyrexia and general ſthenic diatheſis* (*f*),

CCCLXXII. The period of eruption is more or leſs certain, becauſe the operation of fermentation, being in ſome meaſure certain and uniform, to that extent requires a certain uniform *ſpace of* time, for being finiſhed, dif-

(*e*) See par. CXVII. CXVIII. CXX. CXXI.

(*f*) See above par. CLXXV. and CCCXLVI.

fuſed

fuſed over the ſyſtem, and reaching the ſurface of it, as is atteſted by the effect. Again, it is not exactly certain, becauſe the perſpiration, in the varying ſtate of vigour, *that muſt occur*, muſt, *at different times, and* under different circumſtances, be more vigorous or more languid.

CCCLXXIII. The pyrexia, ſymptomatic of the eruption, ſometimes takes on the form of an actual fever: The reaſon of which is, that the high degree of ſtimulus, which the eruption throws upon the whole ſurface, produces ultimately exceſſive excitement, and therefore, *puts* an end *to it in the eſtabliſhment of* indirect debility (*g*).

The Deſcription of the violent Small-pox.

CCCLXXIV. The violent ſmall-pox is a ſthenic exanthema, on the third or fourth day of which, ſometimes later, ſmall ſpots or points, inflamed, and by and by to be transformed into exact puſtules, break out; containing a liquor, *which*, generally on the eighth day after the eruption, often later, *is* changed

(*g*) See par. CCXV. CCXVI.

into pus, and dwindles away in the form of crusts. The eruption, the degree of which is always in proportion to that of the sthenic diathesis, in this case is the greatest that ever occurs.

CCCLXXV. All these phœnomena are governed by the laws of fermentation, lately mentioned (*h*). The number of pustules, being proportioned to the degree of diathesis, shows, that, without the hurtful powers, that otherwise, *and without any co-operation of contagious matter*, produce that diathesis, the contagion has not much effect in producing the real morbid state, and that it chiefly regulates the exterior form of the disease (*i*).

CCCLXXVI. But a violent small-pox is distinguished by the following symptoms: Before the eruption there is a very severe pyrexia; this is succeeded by an universal crust of pustules over the whole body. Antecedent to which, the hurtful powers are very violent sthenic ones, and particularly heat; the remedies that remove it are very asthenic, and in preference *to any of them* cold.

(*h*) See above par. CCCLXVIII.

(*i*) Which, without diathesis, is of no consequence, and does not amount to general morbid state.

The Description of the violent Measles.

CCCLXXVII. The violent measles is a sthenic exanthematic disease (*k*), beginning with sneezing, watery eyes, dry cough, and hoarseness; on the fourth day of which, or later, there appears an eruption of small numerous papulæ, or little points; that on the third day, or later, terminate in an appearance of branny scales. This disease, when preceded with a high degree of sthenic diathesis, is proportionally violent.

CCCLXXVIII. The sneezing, watery eyes, dry cough, and hoarseness, are catarrhal symptoms, and, therefore, depend upon sthenic diathesis (*l*). And, since they appear, four days or more, before the eruption, that is, before the matter might seem to have reached the affected parts, and are constant and universal; hence are we to suppose, that the sthenic diathesis follows the hurtful powers, that usually produce it, and not entirely the peculiar matter in this case, and that it is indispen-

(*k*) See above par. CCCLXVI.

(*l*) See above par. CLXXV.

ſably neceſſary to the meaſles. But though that *ſuppoſition* ſhould be rejected, and it ſhould be contended, that thoſe ſymptoms ariſe from the *contagious* matter; it ſtill muſt be granted, that this diſeaſe differs, however, in nothing from the other ſthenic diſeaſes, but equally depends upon ſthenic diatheſis, and yields to antiſthenic or debilitating remedies. And it muſt be allowed, that, ſince the matter produces the ſame effect as the uſual hurtful powers, its operation muſt be abſolutely the ſame, *and* the cauſe of the diſeaſe the ſame. Conſequently, we find nothing in the indication of cure, but what is in common to this diſeaſe with other ſthenic exanthematic ones, which is, that time muſt be given to the matter to paſs out of the body, and the perſpiration be conducted in the ſame manner, as the ſthenic diatheſis is uſually treated upon other occaſions (*m*).

CCCLXXIX. The eruption admits of the ſame reaſoning that has been delivered (*n*). The circumſtance of its being a violent diſeaſe when preceded by a violent ſthenic diatheſis,

(*m*) See above par. XCVI.

(*n*) See above par. CCCLXXV.

and mild in a mild degree of that diathesis, is a further instance of the little difference that there is betwixt the operation of contagion, and that of the ordinary powers producing sthenic diathesis.

CCCLXXX. When the diathesis runs so high as to suppress the perspiration, the eruption often disappears for a time, as if it went into the interior parts of the body: Which is a danger, that is chiefly threatened at the end of the disease; and shows, that this matter, in the same manner as the variolous, kindles up a symptomatic inflammation over the surface of the body, and then, by a further encrease of the diathesis, suppresses the perspiration. Hence, with other viscera, the lungs (*o*) are often inflamed (*p*).

CCCLXXXI.

(*p*) What follows of this paragraph is erased.

(*o*) That the lungs should be inflamed in a violent state of the diathesis in the measles is not to be wondered at; as the common catarrh, when its diathesis runs high, is liable to produce the same effect. (See par. CCCXLIII. towards the end.) But, considering how many facts in medical writings I have found false, the effect of that on my mind, is to render the weight of testimony in favour of the various internal viscera being so liable to be inflamed, from this supposed striking in of the measly eruption, very

light,

CCCLXXXI. The violent ſtate of the ſmall-pox, often from the great ſtimulus of the eruption, converts both the ſthenic diathesis and eruption into the aſthenic ones, and thereby produces the confluent ſmall-pox, of which we are afterwards to treat. Whether any thing like that is the conſequence of the meaſles, is not yet aſcertained: But, as every exceſs

light, and to diſpoſe me to doubt of the fact altogether: Which I am the more inclined to do, from the analogy of a broad fact in direct contradiction to it: Which is, that the inflammation, depending upon the general diatheſis in ſthenic diſeaſes, never, as I have yet found, affects an interior part. (See par. CXIII. CLXVIII.) Neither is inflammation, from any other ſource, near ſo frequent in internal parts as vulgar opinion has taught us. Diſſection has ſhown inflammation in the inteſtinal canal in dyſentery, or what is called in Engliſh the bloody flux. But that only happened under the evacuant, debilitating, vegetable, plan of cure; and, even in that caſe, ſeems to have been an ultimate, not an early, effect, much leſs a cauſe. And it has been ſhown, that what has been conſidered as a burning inflammation in the firſt paſſages, is not an inflammation at all. (See above par. CXCVIII.) Nay, even when inflammation does happen internally, it is never of the ſthenic, but always of the general, or local, aſtenic kind, and, when quickly cured, cannot be inflammation. If there be any truth in the frequency of inflammation towards the end of the meaſles, it muſt be of the aſthenic

excefs of excitement, as in the converfion of peripneumony into a dropfy of the cheft, is liable to run into indirect debility, it is, therefore, fcarce to be doubted, but that the fame thing happens to this difeafe, which is inferior to none in violence.

The Defcription of the violent Eryfipelas.

CCCLXXXII. The violent Eryfipelas is a phlegmafia, always beginning with pyrexia, and followed by inflammation. The inflammation is feated in fome external part of the body,

afthenic kind: Which is the more likely from its late appearance, and from a circumftance that, though no where taken notice of, has great weight with me; which is, that, as the diftinct fmall pox paffes into the confluent, peripneumony into dropfy of the the cheft, and any fthenic difeafe with its diathefis, into any afthenic difeafe, and the diathefis on which it depends; there is nothing in the nature of the animal œconomy and of the powers acting on it, to prevent the fame converfion of fthenic into afthenic ftate in the meafles. And if, which is moft probable from the alexipharmac practice, that was then ufed in this difeafe, indirect debility can induce fuch a change, no difeafe has a fuller chance for it than the meafles. But I am fure, were the debilitating plan ufed from the beginning, no fuch confequence would happen.

body, ofteneſt in the face, ſometimes in the throat, with redneſs, of an unequal edge, ſomewhat raiſed, creeping from one place to another, and attended with a ſenſe of burning.

CCCLXXXIII. It is peculiar to this inflammation, and foreign from the other general ones, to invade the corpus mucoſum. To aſſign a reaſon for which is of no conſequence; ſince this inflammation does not differ from the others either in the operation of the exciting powers producing it, or in that of the remedies which remove it.

CCCLXXXIV. The cauſe of the redneſs of the inflammation, in this as well as in every caſe, is an exceſſive quantity of blood in the inflamed veſſels; for the queſtion about the degree of redneſs is of no importance. There is leſs ſwelling in the inflamed part, *than in other ſthenic inflammations*, becauſe there is *here* a free ſpace betwixt the ſcarf-ſkin and true ſkin, allowing the effuſed humour room to ſpread and diffuſe itſelf. The ſame is the cauſe of the ſlow motion of the inflammation, and of the inequality of its edges. The ſenſe of burning is owing to an acrimony *of the contained fluid*, acquired by ſtagnation.

CCCLXXXV. The attack of the inflammation upon the face is not more dangerous than upon any other place, except when the diathesis, upon which it depends, is great, rendering the inflammation proportionally great (*q*). In which latter case, whatever part is inflamed, the disease must be held for a severe one; but still severer, if the inflammation seizes the face; in which case a great tumult of affection internally accompanies the disease.

CCCLXXXVI. When such a sthenic diathesis, and affection of the head depending on it, happens, no disease is more dangerous, none more rapid in its race to death; while in a mild diathesis no disease is milder.

A Description of Rheumatism.

CCCLXXXVII. Rheumatism is a phlegmasia, especially in that temperament, which inclines to the sanguine. It is a consequence of heat succeeding to cold, or so alternating with it as to prove the more stimulant: It is accompanied with pain nigh, or between, the

(*q*) See par. LXXXV. CCCXLIII.

joints,

joints, chiefly the greater ones, and proportioned to the degree of the diathesis (*r*): And the inflammation always comes after the pyrexia.

CCCLXXXVIII. External temperature is hurtful in this disease in the same way, as that been often now explained (*s*).

CCCLXXXIX. The rage of the pain is in the parts that have been mentioned (*t*), because it is in these parts that the inflammation, or more encreased part of the general diathesis (*u*), chiefly acts. Which *again* happens, for this reason, that the nearly most powerful of the exciting hurtful causes, the temperature, that has been mentioned (*x*), is only directed thither. There is no translation of the inflammation to the internal parts, for this reason, that these parts, which preserve nearly an equal temperature amidst every change of it externally, are not acted upon by the same hurtful power *which annoys the external parts.*

CCCXC. Cold, according to the common opinion, is not hurtful in this disease; because

(*r*) CCCXLIII.
(*s*) CXIII. et passim.
(*t*) CLXVIII.
(*u*) Ibid.
(*x*) CXIII.

the

the rage of the diſeaſe is greateſt under the operation of heat, which has an effect quite oppoſite to that of conſtriction (*y*). This fact is confirmed by ſtimulant diet, *in all its articles*, proving always hurtful, and by abſtinence being always ſerviceable, and often alone making out the cure. And it brings *a ſufficient* refutation of that miſtaken notion, according to which, temperature is alledged to be more hurtful, and ſweating more ſerviceable, than is conſiſtent with the truth; as if there were no other hurtful powers but the former, no other remedies but the latter. In this, as well as in all other general ſthenic diſeaſes, it is the general ſthenic diatheſis alone that produces, and the ſolution of it alone, that removes the diſeaſe. Which is a clear fact, and ſupported by the evidence of every part of this doctrine that has yet been delivered. The pains of parts, which ſometimes precede this diſeaſe, oftener happen without being followed by it, and that, in both caſes, have nothing to do with ſthenic diatheſis, upon which this diſeaſe entirely hinges, are a local affection, or belong to a very different general

(*y*) Ibid.

diſeaſe,

disease, rheumatalgia, of which more afterwards (z).

CCCXCI. The reason of the greater joints being affected in this disease, and the lesser ones in the gout, is the following: In rheumatism, because both the rest of the disease and the pains depend upon a violent sthenic diathesis; therefore it is, that the greater joints, which, for the reasons assigned, undergo more of the diathesis, have also a greater share of the disease. But, as the gout consists in debility, its influence will be greatest, where there is *naturally* the greatest debility, and therefore in the extreme parts, and those most remote from the centre of activity (*a*).

(z) CCCLIII.

(*a*) To make this subject simple to any apprehension. A person has been exposed to intense cold a whole day. He comes home at night, is set by a warm fire, receives hot meat and warm cordial drink. He is next covered up in his bed with an addition of clothes, receives more warm strong drink. He falls asleep, and next morning feels a pain in some part or other of his upper extremities, nigh, or between, the great joints; and, previous to that, a high state of heat and bouncing pulse, with a certain feeling of uneasiness in different parts of his trunk. The pains encrease in the bed next night in proportion to the encrease of the general affection; and cold, evacuation, and abstinence from food, from alternation of temperature, cure him.

A De-

A Description of the mild Eryſipelas.

CCCXCII. Both the definition and explanation of the violent erypeſilas (*b*), delivered before, ſuffice for thoſe of the mild; but, in ſuch ſort, that the latter, both in its antecedent hurtful powers and ſymptoms, and in the whole nature of its cauſe, muſt be underſtood to be much milder than the former, and not only ſo, but a remarkably mild diſeaſe.

CCCXCIII. It is often not ſo much a ſequel of the ſthenic cynanche, which is commonly called tonſillar, or the common inflammatory ſore-throat, as a ſupervention upon it before it has finiſhed its courſe. It often appears alone and unaccompanied with the cynanche, ariſing from a ſimilar lenity of the hurtful powers, and manifeſting a ſimilar mildneſs of ſymptoms through its whole courſe.

CCCXCIV. Nay, in the ſame perſons, in the ſame ſtate of the hurtful powers, ſometimes this eryſipelas, ſometimes cynanche, ſometimes catarrh, promiſcuouſly ariſe, and

(*b*) From CCCLXXXII. to CCCLXXXVII.

are *all* removed by the ſame gentleneſs in the method of cure (*c*).

A Deſcription of the Cynanche Sthenica.

CCCXCV. The ſthenic cynanche is a phlegmaſia, with an inflammation taking place in the throat, and eſpecially the tonſils, never preceding the pyrexia: It is accompanied with ſwelling and redneſs, and an aggravation of pain in ſwallowing, eſpecially any thing fluid.

CCCXCVI. The reaſon for the inflammation occupying the place mentioned here, has been given before (*d*). And, when it has once taken place, it is afterwards liable to frequent recurrence, becauſe its ſeat being in the

(*c*) I have often experienced them all, ſometimes ſingly, ſometimes all three, in the courſe of the ſame diſeaſe, oftener a combination of inflammatory ſore-throat, and the mild eryſipelas, and, as far as I could obſerve, could diſcern, that the degree of phlogiſtic ſtate that produced them, and of remedies that removed them, were both gentle, the former as ſtimulants, and the latter as debilitating powers; and both ſo nearly of the ſame degree, that, in arranging them, I was at a loſs which to place over the other in the ſcale.

(*d*) See CXIII. CCCXLII.

way

way of the moſt hurtful power (*e*), and leſs covered than other parts (*f*), is expoſed: And the veſſels *firſt* diſtended by the inflammation, and then afterwards relaxed, take in an over-proportion of blood upon every encreaſe of its impetus (*g*).

CCCXCVII. As the inflammation, like *that of* the other phlegmaſiæ, never precedes the pyrexia (*h*), for the reaſon aſſigned (*i*); ſo, if an unſkilful perſon ſhould think it did, the reaſon of that is the gradual degeneracy of the general ſthenic inflammation into a local diſeaſe, from its frequent recurrence, and always leaving a taint behind it in the affected part. This latter *inflammation* may happen,

(*e*) Heat and alternation of temperature. See XXXVI. with addition.

(*f*) See par. CLXVIII. If one is walking in the evening, when a ſudden fog comes on, with cold and chillineſs, he may cover his throat externally, but it is impoſſible to defend it internally.

(*g*) This is ſo liable to happen, when any perſon has once experienced this diſeaſe, that the encreaſed motion of the blood in walking in a warm day, and then ſitting down in a cool place, has ſometimes produced ophthalmia, ſometimes this ſore-throat.

(*h*) See the definitions of them all, &c.

(*i*) See par. CLXVIII, CCCXLIII.

without

without a general ſthenic diatheſis, and, therefore, without being followed by a ſthenic cynanche; and it may accidentally coincide with the former, *or ſthenic diatheſis*, and, therefore, precede the latter, or ſthenic cynanche: But, in both caſes, it ought to be diſtinguiſhed from *the pure* general *caſe*, for the ſake of guarding againſt the commiſſion of a hurtful miſtake in the cure (*k*). In an aſthenic habit, whether ſucceeding to the former or not, there is again another general inflammation, to be referred to aſthenic diſeaſes.

CCCXCVIII. If any perſon can explain why the pain is aggravated in ſwallowing, he may *communicate* his knowledge; if he cannot, it is no matter.

CCCXCIX, The cynanche oeſophagaea has been here omitted, becauſe it is a rare affection, and admits of the ſame reaſoning and cure as the tonſillar, from which it differs not but in the inflammation being farther down, and in ſome redneſs only coming within view. But, as there is a ſuſpicion that it may be

(*k*) This might happen to a perſon under an aſthenic diatheſis, which would be encreaſed by the debilitating plan of cure, and would be uſeleſs in the abſence of diatheſis.

local,

local, as when the aesophagus happens to be eroded or burnt, by a ſtimulus, or ſome acrid matter; the diſtinctions, therefore, ſhould be attended to (*l*), and made uſe of for the ſake of practice.

CCCC. There is likewiſe a rare diſeaſe, ſometimes happening in certain countries, never in others, called the croup (*m*). In it the reſpiration is laborious, the inſpiration ſonorous, with hoarſeneſs, a ringing cough, and a ſwelling ſcarce to be diſcerned (*n*). It is a diſeaſe that infeſts very young children almoſt only. And in all other particulars it is of a doubtful nature (*o*).

CCCCI. Concerning which, when it happens to occur in practice, uſe the following *marks of* judgment. As the ſthenic diatheſis,

(*l*) See above LXXXI. LXXXIII. CLXX.

(*m*) by noſologiſts cynanche ſtridula.

(*n*) It is perceived upon diſſection of the dead ſubject.

(*o*) I never ſaw this diſeaſe, but when I was ſo young a ſtudent, that any obſervations I could make, can be of no uſe to me now. There have been many battles of words about, whether it be inflammatory or ſpaſmodic, without any adequate meaning of the differences betwixt theſe two words, at leaſt ſo far as to influence the practice; which remained much the ſame betwixt the parties, and probably the right one miſſed by both.

in the degree requiſite to *the formation of* actual diſeaſe, which depends upon a high degree of diatheſis, happens leſs, either in the beginning, or towards the end of life; becauſe the high degree of excitability in the former, and the low degree of it in the latter, admit a ſmaller degree of the effect of the the exciting power, *that is*, a ſmaller force of excitement (*p*), than the long period of human age betwixt theſe two extremes; yet it is not altogether foreign from either (*q*). In childhood, the high degree of excitability compenſates for the ſlightneſs of the ſtimulus; while, in old age, the high degree and force of the latter may compenſate for the deficiency of the former, and ſuffice to induce ſome ſthenic diatheſis, even to that degree which conſtitutes diſeaſe. In this way infants undergo wonderful viciſſitudes of excitement, and within the ſhorteſt ſpaces of time. This day they will ſhow every ſign of extreme debility, next day every one of *reſtored* vigour; becauſe the operation of *any* ſtimulus given them ſoon riſes to its higheſt, upon account of their high

(*p*) See par. XXV. and XXVI.

(*q*) Though it is ſeldom that either a child, or very old man, will be ſo ſthenic as to need bleeding and much evacuation, yet they will ſometimes.

degree of excitability, and ſinks as ſoon to its loweſt, upon account of its own ſmall degree (*r*). Hence every ſthenic diatheſis, that happens to them, is ſhort, acute, and ſoon removed (*s*); nor is their aſthenic ſtate of long continuance, or difficult to be removed; provided there is no local affection (*t*), and a proper method of cure is employed (*u*).

CCCCII. The marks of ſthenic diatheſis at this age are, great frequency of pulſe, when compared with that of adults, more frequent than their own in health, diſtinctly meeting the finger upon feeling it; a boundiſhneſs of belly at firſt, which becomes more free in the progreſs of the diſeaſe; dryneſs of the ſkin; burning heat, thirſt, watching, ſtrong crying.

CCCCIII. The ſigns of the aſthenic diatheſis at the ſame age are, a pulſe not to be

(*r*) A child of mine was given over for death by his nurſe: His mother gave him ſome of the diffuſible ſtimulus. He ſlept two hours, and when he waked made ſigns, for he could not yet ſpeak, to have a little pie, moſt of which he ate.

(*s*) A ſingle gentle purge will do it.

(*t*) which very ſeldom, indeed, happens,

(*u*) Which, till of late, has been very rare: The antiphlogiſtic cure has made away with three-fourths of mankind, before they arrived at the ſeventh year of their age.

reckoned

reckoned from its frequency, ſmall, falling ſoftly like ſnow upon the finger of him who reckons it, ſo that he is uncertain if he touch it at all; a very looſe ſcouring belly, with green matter; frequent vomiting; dryneſs of the ſkin, heat greater than natural, and greater in ſome parts than others; interrupted ſleep, never refreſhing; a feeble voice in crying, fit to excite compaſſion.

CCCCIV. The former *diatheſis*, beſides other hurtful powers, is preceded by the uſe of ſound milk, animal food, an abuſe of opium or ſtrong drink; exceſſive heat after cold and moiſture, which latter encreaſes the debilitating effect of the former; a ſtrong ſet of ſimple ſolids.

CCCCV. The latter, together with the known hurtful powers, is preceded by the uſe of milk from a weak, ſickly nurſe; that of vegetable food, with ſugar in it; watery diet; watery drink;. habitual vomiting, habitual purging, both by other means uſed for the latter, and particularly by magneſia, given with the intention of abſorbing an acid; cold not followed by heat; a weak maſs of ſimple ſolids.

CCCCVI. Consider which of these sets of signs precede or accompany the croup, and whether its pyrexia be sthenic or asthenic. Weigh the different sentiments of authors upon the subject. Suspect their theories, but their facts *still* more. Be on guard not to be misled by the vanity, emptiness, and rashness of young physicians; as well as by the obstinacy and bigotry of the older sort, that encreases with their age and practice, to be bent by no force of reasoning, no weight of truth, scarce by the power of God: Regard their minds as bound in the fetters of prejudice: Remember, that a whole age of physicians were in the wrong, except one man (*x*), and

(*x*) The improvement that Dr. Sydenham made was good for the length it went, which was, to use cool and gentle evacuants for the cure of the small-pox, peripneumony, and one or two more of the sthenic diseases. The biass, in favour of the alexipharmac practice, for the cure of catarrh and measles, he never got over. His theories were vague, but with respect to the practice in the diseases among which his reformation lay, they were innocent. He attained not any idea of the nature of diseases depending on debility: And his practice was hurtful in them: He fell a victim to his gout, which could not have happened had he been acquainted with but one disease of the debility. His practice, even when right, was destitute of principle:

and perſiſted obſtinately in their error, in the caſe of the Alexipharmac phyſicians: And, reflect within yourſelf, *good reader!* whether the preſent phyſicians, who follow the doctrines delivered in the ſchools, judge better *than their predeceſſors*, and do not run into the contrary extreme of madneſs, doing as much miſchief in fevers, and diſeaſes of pure debility, as they did in ſthenic diſeaſes, and in fact take a wide range of ſpreading deſtruction among mankind. Thus ſecured againſt miſtake, conſider the cures of this diſeaſe that have appeared. If in thoſe, or in any trial that you may make, you ſhall find that either bleeding and purging, or antiſpaſmodics, as

principle: He had no ſort of comprehenſion of the doctrine of life as a whole, and as a department of knowledge diſtinct from all others. It would have been lucky, however, for poſterity, had his ſucceſſors done as much in aſthenic, as he did in ſthenic diſeaſes. From that beginning, the ingenuity of ſome, at laſt under a right direction, might have brought out more information, and, by gradual and ſure ſteps, at laſt attained a comprehenſion of their whole ſubject. But profeſſors of univerſities ruin every thing: For while they find out nothing themſelves, they throw into falſe lights the uſeful hints of others. This was the effect firſt of the Boerhaavian, then of the Hoffmanian and Stahialian doctrines. See our Obſervations, Outlines, p. lxxxv. to cxlix.

they are called, that is, ſtimulants ſucceed; then be aſſured, that, in the former caſe, the diſeaſe is ſthenic, in the latter aſthenic; *of which you will be ſtill* more certain, if you ſhall find that the exciting hurtful powers and ſymptoms, which have been enumerated, at the ſame time agree *with the other marks of judgment.*

A Deſcription of Catarrh.

CCCCVII. Catarrh is a phlegmaſia, in which, to the general ſymptoms mentioned before (*y*), are added cough; hoarſeneſs; and firſt a ſuppreſſion, or ſlight encreaſe of the excretion from the noſe, fauces, and bronchia, followed afterwards by a further encreaſe; ariſing from ſtimulant powers, often heat alone, but chiefly after a previous application of cold; and to be removed by debilitating powers, often by cold alone, guarding againſt heat (*z*).

CCCCVIII. The explanation of the cough is the ſame as that given before. But it is freeer, *than in peripneumony*, and not avoided,

(*y*) CCCXXXI.

(*z*) See par. CXII. CXIV. CXVII. CXXII. and all the ſtimulant powers, from CXII. to CXLVII.

because

because there is no inflammation in the neighbourhood to aggravate it, and raiſe pain (*a*).

CCCCIX. That the hoarſeneſs is owing to a ſuppreſſion of the vapour that ſhould be exhaled into the bronchia, may be known from this; that, when the hoarſeneſs has remained long, almoſt without expectoration and cough, or with a moderate degree of them, while the ſthenic diatheſis continued in full force, and did not abate in the bronchia; upon the diatheſis giving way, and the expectoration and cough becoming more free, the hoarſeneſs abates, or goes off. That this can be effected by a ſtimulus of that kind and degree, that conſtitutes ſthenic diatheſis, is ſhown by *the effect of* ſtrained ſpeaking producing temporary hoarſeneſs, by ſilence removing the hoarſeneſs, and cold drink relieving it.

CCCCX. The ſuppreſſion of excretion is that of the mucus and exhalable fluid, related before (*b*), and it admits of the ſame explanation that was formerly given.

CCCCXI. That ſtimulants produce catarrh is evident from this, that heat alone, fulneſs in food, ſtrong drink, and moderate exerciſe,

(*a*) See par. CLX. CCCLV.
(*b*) See par. CCCCVIII.

for certain produce it; cold, cold drink, ſpare diet, and reſt, as certainly and effectually remove it. It was, therefore, a very unlucky miſtake, to think it aroſe from cold alone, and was to be cured by heat. On the contrary, cold is never hurtful in it, but when its action is ſucceeded by that of heat, to be explained as before (*c*). The occurrence of catarrh ſo often in ſummer, where its action can be a thouſand times traced back to heat, but not to cold; the influenza never needing the aſſiſtance of cold, which catarrh often does, in the manner juſt now ſaid; its never ſucceeding to *pure* cold, but immediately to heat, facts known to old women, to ſhoe-makers and taylors, to ſore-eyed perſons and barbers, unknown to medical authors and profeſſors, *all* confirm the ſame fact.

A Deſcription of the ſimple Synocha.

CCCCXII. The definition of ſimple ſynocha is the ſame with that of phrenitis (*d*), excepting the ſymptoms affecting the head. It

(*c*) See CXXII.

(*d*) See par. CCCLXI.

is

is a ſlight diſeaſe, ending in health often in one, always in a few days, unleſs when new hurtful powers, either accidentally or from the uſe of a ſtimulant plan of cure, have been ſuperadded.

A Deſcription of the Scarlet Pyrexia.

CCCCXIII. The ſcarlet pyrexia is an exanthema (*e*); about the fourth day of which, or later, the face ſwells ſomewhat, and at the ſame time the ſkin is here and there affected with a red efflorеſcence, and then checquered with large ſpots; which are afterwards to unite, and in three days to end in little ſcales, as if branny ones. This eruption does not ariſe, but in conſequence of ſthenic diatheſis produced from another ſource. And there is another ſimilar to this, which accompanies an oppoſite diſeaſe, afterwards to be mentioned.

CCCCXIV. The eruption, appearing at a certain time, and remaining for ſome time, muſt be imputed to the fermentation, requiring a certain time, different in different diſeaſes,

(*e*) See CCCXXX.

and

and is to be explained in a ſimilar manner as before *(f)*.

CCCCXV. The ſwelling of the face depends upon a greater degree of ſthenic diatheſis there, than any other equal part. And we are to imagine, that, beſides the hurtful powers that uſually produce it, it is encreaſed by the contagious matter, now approaching the ſurface.

CCCCXVI. This matter of itſelf produces no morbid ſtate, only giving the exterior and exanthematic form (*g*), and following the nature of the ſthenic or aſthenic diatheſis. Hence, after its application, the diſeaſe that ariſes is ſometimes ſthenic, as this is, of which we have given a definition, ſometimes aſthenic, as that diſeaſe which we are afterwards to mention in its proper place. This view of it ſerves to reconcile the jarring and contradictory explanations, and methods of cure of authors, who have gone into ſuch controverſies to ſettle its nature.

(*f*) See par. CCCLXVII. and CCCLXXVIII.
(*g*) See par. CCCLXXV.

A De-

A Description of the mild Small-pox.

CCCCXVII. The definition of the mild and violent ſmall-pox is the ſame; excepting that there are often very few puſtules, never exceeding one or two hundred in number: Sometimes the place only, which was inoculated, is beſet with puſtules, without any other in the reſt of the body; and beſides, theſe there may be only one.

CCCCXVIII. The number of puſtules and crouded eruption is occaſioned not by the nature of the contagious matter, nor by its quantity, but by the ſthenic diatheſis, in ſo far as it is induced by the ſthenic hurtful powers, in which the matter has very little participation (*b*). If, therefore, that diatheſis be prevented, and eſpecially upon the ſurface, the eruption will never be crowded; and, after it has appeared, if it be immediately removed, the eruption will never be dangerous.

CCCCXIX. As the contagious matter does not contribute much towards ſthenic diatheſis,

(*b*) See par. CCCLXX. CCCLXXII. CCCLXXV.

for

for the reaſons alledged (*i*) ; ſo, that it does contribute ſomething, is proved by a crowded eruption both appearing and encreaſing, when the diatheſis, after the reception of the contagion, was not encreaſed by the ordinary hurtful powers (*k*).

CCCCXX. And, therefore, while the excitement ſhould be reduced below that degree which ſuits perfect health ; there are, however, certain boundaries, beyond which we ſhould not proceed in the debilitating proceſs.

CCCCXXI. For, when the ſthenic diatheſis is very much reduced, and the excitement immoderately diminiſhed, there appears over the whole body, an eruption quite unlike the variolous, of a high ſcarlet colour, and in its progreſs proceeding conſtantly from a ſpotted appearance into a continued ſheet of

(*i*) From CCCCXVII. to CCCCXIX.

(*k*) This indeed, is a clear proof, that the matter contributes ſomething, and that there may be a degree of diatheſis, compatible with health, unleſs when it is encreaſed, and the perſpiration diminiſhed, by ſuch contagious matter.

efflorefcence (*l*); which, unlefs treated upon a ftimulant plan, would prove fatal.

A Defcription of the Mild Meafles.

CCCCXXII. The definition of the mild meafles is the fame with that of the violent. To which all the reafoning that has been employed about the fmall pox will apply. If, immediately upon the arrival of the catarrhal fymptoms, the afthenic diathefis contrary to every mode of curing this difeafe hitherto thought of, be removed; often no difeafe of that kind which affects the whole body, follows. And the difeafe always proceeds with the fame gentlenefs as the fmall pox treated in the fame way (*m*).

CCCCXXIII. The catarrhal fymptoms are of the fame nature as in the catarrh, and admit of the fame cure, that is, the afthenic (*m*).

(*l*) from the top of the head to the ancles. See above par. CCXX. and two notes.

(*m*) All this has been well proved by every one of my children, and by an 100 patients at once.

CCCCXXIV. Ca-

CCCCXXIV. Catarrh, and ſimple ſynocha, are free from all inflammation, whether general or local. The ſcarlet fever, and the mild ſmall pox and meaſles, are free from the general, and exhibit upon the ſurface a local, inflammation of no conſequence (*n*).

A Deſcription of the Sthenic Apyrexiæ.

CCCCXXV. The ſthenic apyrexiæ, which are equally free of pyrexia (*o*) and every degree of inflammation, ariſe from a ſthenic diatheſis, that has leſs effect upon the vaſcular ſyſtem, *than the other ſthenic diſeaſes* (*p*).

A Deſcription of Mania.

CCCCXXVI. Mania is a ſthenic apyrexia; in which the mind is diſordered, and forms falſe ideas of every thing.

(*n*) See par. CLXX. and CCXI.

(*o*) See par. CCCXXIX.

(*p*) So much ſo, as never to have been thought in any ſort connected with that affection we call pyrexia.

CCCCXXVII. In

CCCCXXVII. In ſo far as mania does not ariſe from a fault of the ſubſtance of the brain, which is a local caſe that ſometimes happens; the powers that have the chief ſhare in producing it, are exceſſive exerciſe of the mental function, and a high exuberance of paſſion. Theſe, however, while they act more upon the brain *than any other part*, at the ſame time do act more or leſs alſo upon the whole body, though not to the degree of drawing pyrexia after them (*q*). Which is proved by the diſeaſe being cured by a debilitating plan, and by other ſtimuli, as well as thoſe juſt now mentioned, not immediately applied to the brain, but to a diſtant part of the ſyſtem from it.

CCCCXXVIII. The moſt powerful of thoſe ſtimuli are, ſpirituous or vinous drink, and opium, and, perhaps, ſome other things, taken into the ſtomach, and firſt acting there. Of the other aſthenic hurtful powers, ſome *of themſelves, and operating* alone, have leſs

(*q*) Compare this with par. XLIX. L. LI. LII. LIII. and indeed with that whole chapter, as the ſevereſt trial of the truth of it; nothing being more natural, than the ſuppoſition that a mad man is only affected in his head, but we ſhall find that not true.

effect

effect in inducing mania, and yet, *even they*, by their stimulant operation, encrease the force of those, that have that hurtful effect; as is proved by the effect of removing them in relieving the disease.

CCCCXXIX. If poisons sometimes produce mania, without hurting the substance of any solid part, their operation must be supposed the same, as that of the general stimulants, their effect the same, and the disease a general one, and the same (*r*). But if these very poisons act by destroying the texture of a part, they must be considered as the origin of a local disease (*s*).

CCCCXXX. The heart and arteries are less affected in mania, *than in any of the pyrexial diseases*; because, the hurtful power, which chiefly affects the vessels, too much food, has less concern in the number of the hurtful powers *here*. And yet that the food, superadded to the other hurtful powers, does prove hurtful *even in this disease*, is evident from *a contrary power*, abstinence, being, among other remedies, found of very great efficacy in restoring the healthy state. Which,

(*s*) See par. XX.
(*t*) See par. V. VI. XX.

with

with what has been ſaid above, proves that mania is not a diſeaſe confined to a part, but extended to the whole ſyſtem.

CCCCXXXI. Although, in the diſeaſes that have juſt now been mentioned (*t*), the pulſe is commonly ſaid, and believed, to be not at all affected, that, however is not exactly the truth; for in mania, ſo long as it continues to be a ſthenic diſeaſe (*u*), more or leſs of ſthenic ſtate can be perceived (*x*).

The Deſcription of Morbid Watchfulneſs.

CCCCXXXII. Pervigilium, or morbid watchfulneſs, is a ſthenic apyrexia (*y*); in which there is no ſleep, or no ſound ſleep, and the mind, in a ſtartled ſtate, is agitated with vivid, ſtrong, or uneaſy impreſſions (*z*).

CCCCXXXIII. The hurtful powers, that produce perviligium, are the ſame with thoſe,

(*t*) from CCCCXXV. to CCCCXXXII.

(*u*) that is, ſo long as it is really mania,

(*x*) The characteriſtic of hardneſs of the pulſe is never wanting, and therefore alſo fulneſs. (See CCCXXXIV.)

(*y*) See par. CCCCXXV.

(*z*) Read after 'eſt' & mens excito animo, vivis, validis, aut moleſtis imaginibus, agitatur.

that produce mania, but inferior in force. It is evidently produced by hard thinking, commotion, or diſturbance of mind, in preference to other hurtful powers. The degree of thought, that has that effect, is not ultimately exceſſive; for, if it were, by effecting a temporary waſte of the excitability, it would produce ſound ſleep; or if it repelled ſleep, it could only act ſo, by means of indirect debility, the conſideration of which is foreign from this place (*a*). And the ſame is the degree of diſturbance of feeling, that proves hurtful, in ſo far as it produces this diſeaſe: Every ultimate exceſs of which (*b*), either ends in ſleep, or induces that vigilance, of which indirect debility is the cauſe. But it is not a ſingle operation of the intellectual faculty, or of the ſtate of any paſſion, or one that happens but rarely, that proves adequate to the effect. For the effect, in that caſe, would be either too ſlight, or of too ſhort continuance; to merit the title of diſeaſe. It is an often returning, or deeply affecting, irritation upon the brain, and, therefore, one that leaves a laſting impreſſion, which has any conſider-

(*a*) See CXLI.
(*b*) See CXLI.

able force in producing this diſeaſe. In this laſt way, an eager, inordinate, and vaſt deſire for the attainment of high objects of purſuit, the impulſe that hurries on to the revenge of a great injury, and the horror that ariſes upon the perpetration of it, the fear of future puniſhment for crimes, are held up to us as productive of high commotion of mind, in the examples of Cataline, Oreſtes, and Francis Spira. As often, therefore, as the mind is ſo excited in its ideas and paſſions, as not to be capable of being compoſed to reſt and ſound ſleep, after a certain ſhort continuance of thoſe, or other ſtimuli; ſo often are we to conclude, that this diſeaſe takes place.

CCCCXXXIV. As the hurtful powers juſt now mentioned (*c*), produce this diſeaſe; ſo there are others, which belong not to this place, *but* are to be mentioned, that alſo repell ſleep (*d*).

CCCCXXXV. To pervigilium belong all the hurtful powers that have been already mentioned in mania (*e*), whether acting with-

(*c*) See the par. CCCCXXX. and CCCCXXXIII.

(*d*) The reſt of the ſentence in the original is ſtruck out as belonging to aſthenic watchfulneſs.

(*e*) See from CCCCXXVI. to CCCCXXXII.

in or without the brain, but acting with leſs force, and which yield to the aſthenic plan of cure.

CCCCXXXVI. As the powers ſtimulating vigorouſly in this way (*f*), and without any diminution of their ſum of ſtimulating, produce pervigilium; from that we learn, that the cauſe of this diſeaſe is the ſame with that of the reſt of the ſthenic form of diſeaſes (*g*), and that the ſame is the ſtate of body in which every one of thoſe diſeaſes conſiſt: Nor is it underſtood, that different hurtful powers, but preciſely the ſame, with only a variation in the proportion of their force, which often happens to other ſthenic diſeaſes, precede *this diſeaſe*.

CCCCXXXVII. The ſame fact is alſo diſcovered from the functions, of which, though theſe diſeaſes are called apyrexiæ, or without pyrexial ſtate, the pulſe, however, is not altogether free of diſeaſe (*h*). On the contrary, it is as much ſtronger than in health, or in the prediſpoſition to aſthenic di-

(*f*) See CCCCXXXIII.

(*g*) from CXLI to CXLVIII.

(*h*) See CCCCXXX. and CCCCXXXI. and the note to the latter.

ſeaſes,

ſeaſes, or in thoſe diſeaſes themſelves, as there is more vigour, and more excitement upholding that vigour, in the ſyſtem (*i*). And the ſtate of the other functions, except thoſe of the brain, that are chiefly affected, is truly the ſame as in the milder ſthenic affections, or in the prediſpoſition to theſe. But, if the brain in this diſeaſe, and in mania, is much more affected than the reſt of the body; there is nothing unuſual in that circumſtance; it being an univerſal fact with reſpect to both diſeaſes and the prediſpoſition to them, that ſome part is more affected *than any other part* (*k*).

A Deſcription of Obeſity.

CCCCXXXVIII. Obeſity is a ſthenic apyrexia (*l*); in which in conſequence of an exceſs of health, rich living, eſpecially in the article of food, and an eaſy ſedentary way of life, the fat riſes to the degree of incommoding the functions.

(*i*) For a proof of their vigour maniacs have often four times the ſtrength, they uſed to have in health.

(*k*) See part firſt, Chap. IV. and in it XLIX. and LII. CLIX. CCV.

(*l*) See CCCCXXV.

CCCCXXXIX. That obeſity, ſo defined, is a diſeaſe, is underſtood from the definition of diſeaſe (*m*); and that it is a ſthenic diſeaſe, appears from the certain ſigns of ſthenic diatheſis in it. Of which, the ſtrong action of the ſtomach, whether the appetite or the digeſtion be conſidered (*n*), and the ſtrength of the other digeſtive organs, are a glaring proof.

CCCCXL. And as in this diſeaſe, the ſtimulus of the exciting powers, raiſes the excitement above that degree of it, which ſuits good health, to that in which ſthenic diatheſis conſiſts, without which laſt there could not be ſuch force in the *action of the* ſtomach, and of the organs that form chyle and blood; ſo, it is in common to this with the other diſeaſes called ſthenic apyrexiæ, that the ſum of all the ſtimuli is much leſs than in the other diſeaſes of the ſame form, that is, thoſe with pyrexia and inflammation; that it never riſes to the extreme height at which indirect debility is produced, and is never indeed ſo great as to be ſufficient to have any conſiderable effect on the heart and veſſels.

(*m*) See IV.
(*n*) See par. CCLXII.

CCCCXLI. But

CCCCXLI. But it happens to all thoſe diſeaſes, that both theſe laſt and all the other functions, get ſomewhat above the ſtandard of the ſound functions, and a great deal above aſthenic diatheſis. And the ſthenic apyrexiæ differ from the other ſthenic diſeaſes chiefly in this, that the exciting powers keep much within that degree *of force*, that waſtes the excitability much; as is perceived from the proof of the effect; for they are diſeaſes of much longer ſtanding than any other aſthenic diſeaſes.

CCCCXLII. From which fact, however much the brain may be affected by its own proper ſtimuli; however great the quantity of blood in its veſſels may be; unleſs to the excitement ariſing from theſe, that *excitement*, which the other ſtimulant powers produce, be added, it is certain, that the general effect will be much leſs, and that the united energy of all the powers has far more effect, than the ſeparate force of any.

CCCCXLIII. The diatheſis, then, in theſe diſeaſes, is, upon the whole, leſs than in the reſt of the ſthenic diſeaſes; that of a part, as of the brain in mania and pervigilium, and of the blood-veſſels in obeſity, is pretty con-

ſiderable. The whole is in general as great as that in the prediſpoſition to the other diſeaſes, and exceeding its force in the labouring part. Hence it comes out, that, contrary to the nature of thoſe other diſeaſes, and ſimilar to the prediſpoſition to them, they are uſually of long ſtanding and duration, and for this reaſon, that the mediocrity of the ſum of ſtimulant operation never conſumes the excitability, and always produces too much excitement. The great tumult of ſymptoms in the brain and *blood*-veſſels in theſe diſeaſes does not imply a great ſum of excitement, for this reaſon, that the affection of a part, however formidable, compared with the affection of all the reſt of the body, is infinitely inferior in its degree (*o*). However much, then, any ſtimulus preſſes upon a part, and from that ſpreads at large over the reſt of the body; unleſs, however, other ſtimuli, applied to other parts, ſuſtain its operation, ſo as that the ſum of the operation of them all may deeply affect the whole body; the effect of the ſolitary ſtimulus, making a figure in a part, will be leſs conſiderable in the reſt of the body: In fine, it muſt be kept in mind, that every violent diſeaſe always ariſes from

(*o*) See par. XLIX. to LIII.

the

the excitement which the united force of ſe-veral ſtimuli has produced.

CCCCXLIV. In theſe ſthenic apyrexiæ, as a certain part, the brain in the two firſt, and the blood veſſels in the laſt (*p*), is much more affected, and in greater proportion, than in the other ſthenic diſeaſes, becauſe the affection of the part is much leſs ſupported by ſtimuli acting upon the other parts; ſo the ſtimuli, acting in that way upon the labour-ing parts, are, however, underſtood to affect the reſt of the body, though leſs conſiderably. That this is the fact, is proved by there being *in this caſe*, no aſthenic diatheſis, and evidently ſuch a ſthenic one, as upholds the prediſpoſition to other diſeaſes of the ſthenic form; by the remedies, which affect other parts, as it will by and by appear, being aiding in the cure here, and by powers of a contrary nature, always proving hurtful. Whence, it is an evident and certain truth, even here, where it might have been leaſt expected, that every ſtimulus that affects a part, affects the whole body, upon account of the excitability being one uniform, undivided, property over the whole.

(*p*) See par. CCCCXLIII.

CCCCXLV. With

CCCCXLV. With respect to obesity in particular; that the other hurtful powers, as well as food, have more or less effect, one may know from the certain fact of the digestive powers, which depend upon the influence of these *powers*, being of such force and vigour, as to perform their functions more perfectly *in fat persons*, than in others, who are, nevertheless, not by any means weak. Yet these hurtful powers are applied in a degree short of that, which being ultimately excessive, or approaching nearly to that, puts an end to excitement by wasting the excitability, or which tends, by a high degree of disturbance, to exhaust the body.

CCCCXLVI. Thus passions are not with such persons too stimulant; a circumstance known to the generality of mankind, among whom it is an adage, that fat persons are commonly good natured (*p*), while

(*p*) This must be taken with more than grains of allowance; since such is the effect of the different motives to human action received from example and education, that the passions themselves are drawn into a subserviency to every person's predominant pursuit. I have known a person in Edinburgh get great credit for his integrity, though that was not extraordinary, from roughness of manners and an affectation of passionateness, while the dissimulation

while morofe perfons are for the moft part lean. Thus it is obfervable, that fat perfons are averfe to thinking, which is a great ftimulus (*q*). They are averfe to bodily motion, by which all the functions, and particularly that of the veffels, are much excited, and the perfpiration proportionally promoted; and *they have* fo far reafon for it, that all motion is more fatiguing to them than to others. Hence, that quantity of fluids, which under motion is ufually thrown off by the pores on the furface, and turned out of the courfe to the adipofe cells, has a great opportunity of quitting the direction to the

diffimulation of that real difpofition is the more general engine among men of promoting their intereft. At any rate, fo much more than mere appearance of temper, which may be fo much over-ruled, is neceffary to the eftablifhment of maxims; that I fhould think my life or property upon an infecure footing, if it depended on the good nature of a perfon, for which the only fecurity was his fatnefs.

(*q*) The moft poring perfons are the atrabilarians, who, though they are not calculated for the elevation of mind that difcovery requires, have, by their affiduity, contributed much to the improvement of many of the arts. They are commonly very meagre, indeed, and indefatigable in any purfuit, to which they give themfelves up.

former,

former, and of turning aside, in a state of rest, to the latter.

CCCCXLVII. After explaining the peculiarities of these diseases; *it is now to be observed*, that, since the affection of a part in general disease, depends upon the general affection, is of the same kind, arises from the same exciting powers, and is removed by the same remedies (*r*); it is from that reasonable to believe, that the affection of a part, whether it be inflammation, or a greater affection of the brain or vessels, than of any other part, is not different in different cases, but altogether the same in all; that it only differs in some trifling circumstances of no signification, and by no means requires a different *plan of* cure, or affords fundamental distinctions; and that a mistake, which has had the most ruinous effect upon the art, must be done away. It is with propriety, then, that all the diseases that have been treated of, have been reduced not first to two genera, and after to species (*s*), but, without regard

(*r*) See part first, Chap. IV. and particularly par. LIII.

(*s*) which was attempted and dropped in the first edit.

either to genera or ſpecies, only to two forms.

CCCCXLVIII. Further, as in all thoſe diſeaſes the whole morbid ſtate, either in ſo far as it is univerſal in the ſyſtem, or confined to a part, proves hurtful by giving too much excitement; and as the remedies, that remove the general morbid ſtate, alſo remove the portion of it confined to a part, and are never to be directed to a part (*t*), with the view of removing, by their action upon it, the diſeaſe, as if all locked up in it; the meaning of all that is, to lay a ſure foundation for the eſtabliſhment of a certain ſeries, or ſcale, of encreaſing ſtrength from perfect health to the moſt ſthenic diſeaſe. In that ſcale peripneumony holds about the higheſt, and obeſity the loweſt, degree.

CCCCXLIX. Peripneumony and phrenitis in the upper end are followed by two diſeaſes, that ſometimes equal them; the violent ſmall pox and meaſles. Theſe two are ſucceeded by a diſeaſe, that ſometimes vies with them, the eryſipelas, when accompanied with a moſt ſevere affection of the head. Equal

(*t*) See par. LVI. and XCII.

to

to this, not in danger, but for the moſt part in the degree of diatheſis; rheumatiſm comes next. Next to rheumatiſm is marked the mild and gentle eryſipelas, *far ſhort of thoſe above it in violence*, and claiming nearly an equal place to the ſthenic cynanche, being much more nearly allied to the latter than any of the former. Thoſe are the diſeaſes accompanied with pyrexia and inflammation.

CCCCL. Of theſe two which ſtand loweſt, the mild eryſipelas and the ſthenic cynanche, or common inflammatory ſore throat, are of ſo doubtful a rank with reſpect to each other and catarrh (*u*), a diſeaſe without the accompanyment of inflammation; that it is doubtful which of them all ſhould be ſet above the others. Below them, however, the ſimple ſynocha and ſcarlet fever, in ſo far as the latter is an aſthenic diſeaſe, and in ſo far as the uſual ſtate of them both is conſidered, are to be placed without any heſitation (*x*). The loweſt part of the ſcale of ſthenic

(*u*) See CCCXCIV. and the note to it.

(*x*) The ſimple ſynocha is ſo ſimilar to a gentle typhus, that it requires great judgment to diſtinguiſh them at firſt. The ſafeſt way, when the doubt cannot be determined, is

ſthenic diſeaſes with pyrexia, is aſſigned to the ſmall pox and meaſles, in their mild ſtate.

CCCCLI. Through this whole ſcale it is not ſo much the titles and names, that have been made uſe of, but morbid energy, that is regarded; it being the certainty derived from the cauſe, not the uncertain and perfectly deceitful conſideration of ſymptoms, that was to be conſidered *(y)*. The inveſtigation of ſymptoms, which has hitherto been devoid of all benefit, has been of the higheſt detriment to the art; and as much in medicine the moſt productive ſource of fundamental blunders, as the queſtion about abſtract cauſes had been in the other departments of philoſophy (*z*), muſt be laid aſide, and Noſology damned.

is to keep the patient in a moderate temperature, and in a ſtate of reſt; as any debilitating power, in caſe the diſeaſe ſhould turn out a typhus, would be dangerous; and, though it ſhould afterwards manifeſt itſelf a ſynocha, ſtill its mildneſs renders the omiſſion of any thing that might have been done, innocent; and it is always eaſy to take down ſthenic diatheſis.

(*y*) See par. LVIII.

(*z*) See par. XVIII. and look into Obſervations on the different ſyſtems of phyſic, and in it the introduction throughout.

CCCCLII. Be-

CCCCLII. Below the laſt mentioned diſeaſes, mania, pervigilium, and obeſity are ſet. Betwixt which, and the diſeaſes mentioned above, is the *point of* perfect health to be fixed (*a*).

The Cure of the Sthenic Form of Diſeaſes.

CCCCLIII. To apply the indication of the cure of the ſthenic form of diſeaſes to practice; that mentioned before (*b*) will be accommodated firſt to a violent degree of the diatheſis and danger of parts, in ſuch a manner, as that regard only will be had to the degree *of force* in the remedies (*c*).

CCCCLIV. When, therefore, a violent diatheſis is diſcerned, as in peripneumony, phrenitis, the ſmall pox, the meaſles, and eryſipelas, in the higheſt degree of theſe three laſt, immediate recourſe muſt be had to the moſt powerful and quickly effectual remedy; and ſo much blood ſhould not be taken, as many who entruſt nearly the whole cure of the

(*a*) It will be eaſy for the reader with the directions above to make out the table for himſelf.

(*b*) See par. LXXXVIII.

(*c*) See alſo par. XCII.

diſeaſe

disease to it, think (*d*), but more, however, than others are of opinion, should be taken away (*e*).

CCCCLV. No measure suits all cases; the quantity to be taken being different in different cases, as those differ in age, sex, strength, and in the degree of force applied by the exciting hurtful powers. In childhood, which, excepting the measles, and small pox (*f*), is seldom affected with the diseases we have mentioned, and in a very advanced age, which is also in less danger than that at the flower of human life; sparing bleeding succeeds for this reason, that, at both those ages, it is a lesser degree of excitement that upholds the disease as a cause; while in the former, the high degree of excitability, in the latter the necessity for more stimulus or ex-

(*d*) which is the common practice;

(*e*) The most early among the Alexipharmac practitioners, after once making his escape from peripneumony without bleeding, fell a victim to the folly of his theory in the next attack. The Alexipharmacs in general were too moderate in their bleedings in the true, though few, sthenic diseases that require it, and all in the wrong in their use of heating stimulant prescriptions in them.

(*f*) See par. CCCCI.

citing power, than formerly, ſet bounds to *the meaſure of the remedy*.

CCCCLVI. A better rule for limiting the degree of bleeding is the relief, or temporary ſolution, of the urgent ſymptoms. If, therefore, after blood has been taken, the great heat, the hardneſs of the pulſe, the affection of the head or of the lungs, and dryneſs of the ſurface, ſhall have gone off, or been much abated; and now the temperature is diſcerned to be much more moderate, the pulſe more ſoft, and leſs frequent, and the ſurface of the body more moiſt, at leaſt leſs dry; if the pain is every where quieted, the breathing relieved, and the delirium removed (*g*); then it may be looked upon as certain, that enough of the vital fluid has been ſhed for the time.

CCCCLVII. To obtain that benefit, in the moſt vigorous adult ſtate 10 or 12 ounces, and much leſs *either* before or after *that period of life*, will for the moſt part be found ſuffi-

(*g*) The references for facts are CLIX. CLV. CCCXXXIV. CLVII. CLXXIV. CCCXLIX. to CCCLV. CLIV. CLIX. CLXXXIV. CCCXXXIII. to CCCXXXVI. CLV. CCCXLIII. CCCLIV. CLVIII.

cient. As this rule will not anſwer in every caſe, when it fails, recourſe muſt be had to that, which recommends the abatement of the ſymptoms as a direction more to be depended upon (*h*).

CCCCLVIII. Since the local affection depends upon the degree of the general (*i*) diatheſis, remember, therefore that there is no occaſion for any particular direction with regard to it, any farther, than to take advantage of its being acceſſible to help the general remedy by an application of it to the part (*k*).

CCCCLIX. When that has been done, and the firſt violence of the diſeaſe is now broken; we muſt next have recourſe to purging the belly, as a great remedy in point of efficacy (*l*). To effect which, we ſhould not employ violent means, ſuch as many formerly employed (*m*); the ſtimulus accompanying

(*h*) See CCCCVI.

(*i*) See above LVI. and CCCXLII. to CCCXLVI.

(*k*) Ibid. an inſtance of ſuch aſſiſtance may be the local bleedings over the pained part in rheumatiſm and the gout and ſome other aſthenic remedies are aided by local ſtimuli.

(*l*) See CCLXXXIII.

(*m*) the Alexipharmacs particularly

the firſt operation of which being liable to be hurtful; but it is the gentle cathartics that ſhould be depended upon, ſuch as Glauber's ſalts, which are highly debilitating, and carry a great quantity of fluids out of the veſſels. Though a man of good ſenſe in the laſt century uſed theſe day about with bleeding; yet, if the violence of the diſeaſe ſhould be urgent, there is nothing to hinder the uſe of them the ſame day that the blood has been taken.

CCCCLX. Purging, after a ſparing bleeding, has more effect in overcoming ſthenic diatheſis, than any bleeding without it; becauſe, as it has been mentioned above, in that way the debilitating power, (which has always more debilitating effect in the place to which it is firſt applied, *than in any other*,) is applied to more parts; and not only to the greater blood-veſſels, but alſo to a prodigious number of their terminations; and the excitability is more extenſively, and therefore, with more equality diminiſhed (*n*).

ω. Vomiting, which, in aſthenic diſeaſes, where it is pernicious, has hitherto never

(*n*) See par. CCCCLXXXIII. CCCCLXXXVI. alſo CCCV.

been

been admitted in the common practice, and in sthenic ones, where it is of the greatest benefit, ever neglected, comes in here as a proper part of cure; being of the same evacuant nature, and in another part of the same canal, and admitting of all the reasoning that has been applied to purging (*o*).

CCCCLXI. At the same time that the excessive, and therefore hurtful, use of the lancet is superseded by those two last mentioned evacuations; its use, however, is not altogether to be laid aside in the diseases of excessive excitement; and for this reason, that the excitement, by its stimulating operation often rises to that high degree, that, from the consumption of excitability which puts an end to its existence, threatens instant death (*p*).

CCCCLXII. Besides, those remedies (*q*), the patient should always be required to abstain from every sort of food but vegetable, and in a fluid form, as well as from all strong drink, and *indeed* all but watery drink, ac-

(*o*) See the same. What respects vomiting here, is a supply of a great omission, that had run through both editions of the Elementa Medicinæ.

(*p*) See par. CCLXXXI. and CCLXXXIII. CCLXXXIV.

(*q*) From CCCCLIV to CCCCLXII.

cidulated (*r*). This direction does not ſeem to have been ſo much neglected in words by former *writers and authors*, as in fact and actual application to the practice; it having been delivered ſlightly, by the by, and as if it had been thought of no conſequence, *with ſuch effect*, that its force made no impreſſion upon the mind of the reader or hearer. No ſtimulus is more powerful, and, therefore, *in this part of the practice*, more hurtful, than that of the articles of diet: Conſequently, whatever quantity of blood is taken from its veſſels, whatever quantity of ſerous fluid is carried off by the mouth and anus, if that ſtimulus is not roundly guarded againſt, all this evacuation may eaſily be fruſtrated. While that is the caſe, ſtill fluid vegetable matter is not to be diſcharged, and for this good reaſon, that watery matter is not kept in the veſſels; but, eaſily entering the ſmalleſt of them, flows out in all directions by their various outlets; and, at the ſame time, ſupports the efficacy of another remedy (*s*), by and by to be mentioned.

CCCCLXIII. Conjointly with the uſe of the firſt bleeding, of the firſt vomiting and

(*r*) See CCLXXXIV.

(*s*) ſweat.

purging, and that of abſtinence and watery drink, it muſt not be forgot, that particular regard muſt be paid to temperature (*t*): For, if cold always debilitates, and if that is its proper operation (*u*), if it only ſeemingly acts otherwiſe, becauſe heat ſucceeding to its action, or alternating with it (*x*), converts it into a ſtimulant one, if it alone is adequate to the cure of the ſmall-pox (*y*), and prevents the violence of that diſeaſe, if it is the beſt remedy for catarrh (*z*), and, when heat is avoided, of the greateſt aſſiſtance in every ſthenic diſeaſe; it is not to be doubted, but that it is of the greateſt benefit in the diſeaſes of the higheſt ſthenic diatheſis.

CCCCLXIV. Its operation in the ſmall-pox, and in the reſt of the ſthenic diſeaſes, is not different, but altogether the ſame. Nay, in all the diſeaſes of this form, as cold alone is ſufficient to effect the cure; ſo, whenever the diatheſis, which is the caſe in the diſeaſes that make our preſent ſubject, riſing

(*t*) See par. CCLXXXII.
(*u*) See par. CXVII.
(*x*) See XXXVII. and the addition.
(*y*) See par. CXXI.
(*x*) See CCCCVII.

to its greateſt rage, demands inſtant relief; be-cauſe, *in that caſe*, every moment's delay brings inſtant danger; becauſe the remedies, which we have mentioned, are ſufficient for the ſolution of the diſeaſe, of which we have the direct proof in the practice; becauſe that degree of cold, which could produce that effect, is neither always within our reach, nor can be managed by every perſon; and many perſons might not be diſpoſed to believe its effects ſo beneficial: For thoſe reaſons we ſhould not deſiſt from the plan of cure here laid down (*a*), and do our beſt for our patient, by taking off the blankets, and other clothes, by cooling the room, and, inſtead of laying him on a couch or bed, putting him into a chair.

CCCCLXV. This plan of cure ſhould, for the moſt part, be preferred to *that of* the moſt intenſe cold, for this further reaſon, that the ſhortneſs of the time in which any one could poſſibly remain in it, would oblige him immediately to return to a higher tempe-rature, which would produce a greater ſtimu-lus of excitement, *than that he had been un-*

(*a*) From CCCCLIV. to CCCCLXV.

der

der before *his exposure*, at least too great a stimulus (*b*).

CCCCLXVI. Since such is the operation of cold (*c*), the power falsely imputed to it, of occasioning the striking in of the measles, is to be imputed not to cold alone, but to heat and other stimuli; giving, as has been explained, more excitement (*d*), than if it had not preceded. And why not? If cold does not interrupt the eruption in the small-pox; but, on the contrary, by an enlargement of the diameters of the perspiratory vessels, which are shut up by sthenic diathesis, highly promotes the discharge of that matter (*e*): Why, in a most similar case, should its operation be supposed different, not to say, diametrically opposite? Must we again have the trouble to refute the false notion of thinking a cause precisely the same should produce contrary effects? Cold diminishes the eruption in the small-pox: It makes it disappear in the measles. What then? Take a nearer view of the fact: Is its effect in both these cases to be

(*b*) See XXVI.

(*c*) Look back from CCCCLXIII. to CCCCLXVI.

(*d*) See XXVII. and the addition, and CCCLXXX.

(*e*) See CCCLXXVI.

supposed

ſuppoſed the ſame, or different? How comes any perſon to know, that the matter, which has diſappeared, is driven into the interior parts? What proof will you bring of that? Confeſs the truth: And be candid enough to acknowledge, that this is another relick of the alexipharmac doctrine, *handed down to us*, which ſuppoſed, that the ſtimulus of heat as well as other ſtimuli promoted, and that cold impeded, perſpiration. And after a great man had ſhown the error of that doctrine, both in the ſmall-pox and other diſeaſes *(f)*, becauſe he did not carry the application ſo far as the meaſles, neither has any one of his followers, who never could ſtep a nail's breadth beyond his words. But it might have been obſerved, *if obſervation had been any part of their employment*, that the meaſles was a ſthenic diſeaſe as well as the ſmall-pox. Are not all the ſucceſsful remedies in both of the debilitating kind? And as it was manifeſt, that in the ſmall-pox alſo cold debilitated, or in the common language, acted as a ſedative; might not ſome ſuſpicion have, from that very circum-

(*f*) In peripneumony he took his patients out of bed, and ſet them in a chair, for the ſake of cooling them, and avoiding the hurtful effect of heat.

ſtance,

ſtance, occurred to their mind, that cold, in the meaſles, did not ſtimulate, or act as an aſtringent; and in that way, repel the eruption, but performed the ſame operation as in the ſmall-pox? Is it, to ſuch a degree, difficult and up-hill work, to think and uſe one's own good ſenſe, that, a great part of mankind, even thoſe who take upon them the buſineſs of teaching and taking the lead of others, in no caſe, ever think of exerciſing a moment's reflection of their own? But, in this caſe, it may be contended, that the action of cold is peculiar, becauſe, after the eruption, *which it is ſuppoſed to check*, has diſappeared, all the ſymptoms encreaſe in rage and violence. Conſider what that circumſtance makes for the argument, or whether it makes any thing, and not abſolutely againſt it? Was the action of cold, that is ſuppoſed, followed by *that of* ſtimulant or debilitating powers? If it was by the former, the cauſe of the miſchief muſt be imputed to them; which, as has been ſaid juſt now (*g*), produce exceſſive excitement after a previous application of cold, and more than without it; if the latter, *or debilitating*

(*g*) in the laſt paragraph but one.

powers

powers were used, then there would not be wanting a suſpicion, that cold had a concern in the effect. But it is not ſo: And, in every caſe, in which the action of cold has been followed by ſthenic diatheſis, the true cauſe of that effect is not ſufficiently guarding againſt the ſtimulus of heat, as well as that of other noxious powers. And this is moſt clearly proved by the uſe of heat being poſitively ordered, inſtead of being forbid, in the common practice. Nor is that to be wondered at: For if the cauſe of catarrh (*h*) deceived phyſicians ſo much, the catarrhal ſymptoms in the meaſles could not fail to deceive them. And, if doctrines, diſcarded in words, are often kept up in fact; what was there to hinder this part of the alexipharmac doctrine from meeting with a ſimilar fate?

CCCCLXVII. If cold, therefore, can ſcarce be ſo managed, as that the effect occaſioned by the accompanyment, the ſucceſſion, or the alternation, of ſtimulants with it, may be prevented, whether that be the fault of the phyſician, or owing to the difficulty of the nature of the thing (*i*); it is, notwithſtanding,

(*h*) See from CCCCVII. to CCCCXII.

(*i*) Turn back to CCCCLXV. and CCCCLXVI.

ſtanding, a rule in common to the meaſles and other exanthemata of the ſame ſtamp, to avoid heat, and compenſate for the degree by the greater duration of cold, and to guard with all poſſible care againſt every ſtimulant power. It is now then moſt evident, that the opinion of cold being peculiarly hurtful in the meaſtes, both in that and every other diſeaſe of the ſame form, falls to the ground.

A Repetition of the Cure.

CCCCLXVIII. After uſing the remedies which have been mentioned (*k*), when the ſymptoms are renewed, the ſame train of medicines muſt be again gone through: Blood muſt be again taken, emetics and purgatives again adminiſtered; nor muſt we deſiſt from the uſe of the refrigerant and attenuant plan: And all theſe particulars muſt be executed, till the tumult of the ſymptoms be allayed, and the healthy ſtate, at leaſt for the time, be reſtored; and perhaps *the repetition may be required* a third time or oftener: After doing which;

CCCCLXIX. If the diatheſis ſeems now nearly removed, if the affection of the head,

(*k*) from CCCCLIV. to CCCCLXVIII.

of the lungs, or any internal one, ſeems alleviated or repelled; and yet there is ſome apprehenſion of a likelihood of the return of the diſeaſe: in that caſe, recourſe muſt be had to more gentle debilitating powers. Sweating, the ſtimulus accompanying the firſt operation of which, the body, as the diatheſis is now rendered mild or ended, will be able to bear, muſt be preferred to bleeding, vomiting, and purging. But before proceeding to ſpeak of it, it ſeems proper to ſay a few things upon the ſum total of blood that ſhould be taken *during the courſe of the whole diſeaſe.*

CCCCLXX. As in ſingle bleedings, ſo alſo in the whole quantity of blood to be taken, the ſum ſhould be a mean betwixt thoſe, which the common run of phyſicians approve, while ſome think too much, ſome too little, ſhould be taken. The reaſon for this recommendation is ſtrengthened, by the conſideration of there being now leſs occaſion for ſhedding a great deal of the vital fluid, ſince the cure is now more divided among the other remedies that have been ſpoken of. The age muſt be regarded, as was formerly recommended (*l*), the former mode

(*l*) See CCCCLV.

of

of life muſt be looked to, the quantity of ſtimulus, that may lately have preceded the morbid ſtate, muſt be conſidered, and the ſtate of the body compared with the degree of the ſymptoms and the effect of the cure. From thoſe circumſtances a judgment ſhould be formed of bleeding and other evacuations; and it ſhould be eſtimated, what further of the ſame ſort may ſeem proper to be put in practice, or what difference of management may be required. Upon the whole, it will be found, that there will be the leſs occaſion for any one medicine, the more freely others have been brought into uſe; and it will be underſtood, that the danger of too great evacuation will be thereby avoided, and the health better ſecured (*m*).

CCCCLXXI. With reſpect to the kind of bleeding, it ſhould always be made from a very large vein; becauſe the cutting a leſſer one, or opening an artery, does not afford a ſufficient quantity for the relief of the veſſels, and arteriotomy is further attended with certain inconveniencies (*n*). As far as any certain rule, in an

(*m*) See CCLXXXVI. and CCCV.

(*n*) The blood is ready to break out again after the tying up; and if, as ſome adviſe, the arterial twig ſhould be

an affair of ſuch variety, can be eſtabliſhed, two pounds of blood in three or four days, with the aſſiſtance of the other remedies, will, for the moſt part, be ſufficient at the middle age of life, and leſs at a more early or later period.

CCCCLXXII. All bleeding ſhould be followed by vomiting and purging, ſo long as any conſiderable part of the ſthenic diatheſis remains; nor ſhould the other parts of cure, that have been pointed out, be neglected. But purging, a ſingle doſe of which can at any time, bring back a fit of the gout; which cures the ſthenic cynanche or common inflammatory ſore-throat, and the mild eryſipelas, when even the face or head is affected; which is of manifeſt detriment in fevers; which, in dyſpepſia, in aſthma, and every ſort of diſeaſes depending upon debility, whether direct or indirect, does very great and conſpicuous miſchief; and is a great part of the very bad common method of cure over the whole form of aſthenic diſeaſes; in proportion as it ought to

be cut through, it diminiſhes the number of the few acceſſes to this mode of bleeding; neither does there ſeem to be any uſe in deſtroying ſuch veſſels, eſpecially as no good purpoſe can be ſhown for doing ſo.

be

be avoided in all those diseases, should be as certainly laid hold of in sthenic diseases, and not omitted in any considerable one, such as those are that require bleeding, but be managed according to the directions given (*o*) lately, and as it was *directed to be* managed before (*p*). And we must, above all things, be on our guard against that diffidence in the use of this remedy, as well as in that of vomiting, where they are serviceable, and that confidence in them when of disservice, both introduced by the spasmodic doctrine; and know that they were both admitted upon a false and absurd principle (*q*).

CCCCLXXIII. As nothing in asthenic diseases has been more used than these two modes of evacuation, nothing with more hurt,

(*o*) See CCCCLXI.

(*p*) See CCLXXXIII.

(*q*) The principle, at least with respect to purging, was, that it diminished perspiration, and, therefore, was understood not to act as an antispasmodic. A balance betwixt the excretion by the belly and that on the surface was talked of, and they were held for opposite operations. In such theoretical nonsense they deserted their only good leader, at least in those diseases, who alternated his bleedings and purgings, and, as I have found, upon the best foundation.

and often with inſtantaneous deſtruction; ſo, for that very reaſon, nothing is more happy and ſucceſsful *than their uſe* in the cure of ſthenic diſeaſes.

CCCCLXXIV. It is ſcarce credible to ſay, how far the averſion to the alexipharmac method of cure has had the effect of branding the very beſt medicines, what a depraved uſe of them it has ſuggeſted, and to what a degree it has perverted their proper uſe. Not to repeat what has been formerly ſaid of that kind in other inſtances; ſweating, which is of the higheſt ſervice, and a moſt efficacious means of cure, in every moderate ſthenic diatheſis, in every degree of it, that is not the higheſt, or where it preſſes not upon any organ of importance to life; that is, in all the diſeaſes of this form, except in the beginning of thoſe of which we are here treating, has, however, of late been completely baniſhed from the cure of every one of them, but one, not only, as uſeleſs, but as hurtful; which has chiefly happened ſince the ſpaſmodic doctrine began to be received into this country, and, *for a few years only*, gradually to gain ground (*r*).

(*r*) Turn back to CCCCLXIX.

CCCCLXXV. But, in truth and fact, except rheumatism (which, at least as produced by one form of a medicine, it is allowed to cure), if it most certainly either relieves or removes the sthenic cynanche, erysipelas itself, and catarrh, and the simple synocha, in proportion to the more free or sparing use of it; if that be known to the very vulgar, and most certainly to physicians, of *any other than the spasmodic* practice; what reason, what certain and well proved fact, will any one bring, *to show*, why sweating should not be used, after the most violent diathesis is much diminished by the other medicines, and is now reduced to that small degree, to which that remedy is adapted; what eloquence would be requisite to bring any man *of sense* into such a persuasion?

CCCCLXXVI. They will say, that the heat, which accompanies the first part of the operation of sweating, may be hurtful; for, as he never made trial of it, he has it not in his power to say, that for certain it will be hurtful (*s*). As that effect will readily be admitted

(*s*) It is laughable to hear such persons talk of their practice, from which they never can receive information; is

ted in an high rage of diathesis, threatening indirect debility (*t*); it will not also be granted, that in a moderate *degree of* the diathesis, either from the beginning, or effected by the other remedies, and, consequently, after the plan of cure, that we have laid down, has been executed, that such heat will not be compensated by the great profusion of fluids taken away over the whole body; and that, when this part of the vascular system has been freed from a violent stimulus, the diminution of excitement will not be more equal in all the

it being not the effect of any thing they know themselves, but what they have been told by others. In that way, without any exercise of judgment, without a single observation, that they can call their own in the course of a long life, do they jog on, like the blind beggar led by his more faithful dog, or, like children in the play of blind Harry, groping about with their eyes tied up, through the whole course of a practice boasted of, God knows, by no body who knows it but themselves.

(*t*) If the diathesis should rise within two or three degrees of indirect debility, in that case the heat of the first part of a sweat, by exhausting the little excitement that remains, may have a most hurtful effect. But if the diathesis be any where below that high point, the addition of stimulus can be borne for the short time of its continuance; and be afterwards much more than compensated by the large and continued flow over all.

vessels,

veſſels, and over the whole nervous ſyſtem. If the numerous veſſels, that open into the inteſtines and into the ſtomach, are ſo powerful in diminiſhing ſthenic diatheſis, how ſhould a ſimilar evacution in the ſimilar perſpiratory veſſels have no tendency to produce the ſame effect? With which reaſoning if the facts juſt now related be further conjoined, what will any perſon have to ſay againſt the uſe of ſweating, when a degree of heat, not greater than what cannot be avoided, attending the operation of the ſweat, can no *longer be hurtful, and the ſweat itſelf certain to be of great* ſervice (*u*). Let the ſpaſmodic caviller againſt the uſe of that remedy, in the caſes *of ſthenic affection where it is admiſſable*, muſter up all

(*u*) In an excitement of ſixty-ſeven, within three degrees of indirect debility, the heat in the firſt part of the ſweat, by adding theſe, might kill the patient, if you will, without leaving any chance of relief from its evacuant effect. But, if the excitement be no higher than 60°, the addition of the three degrees will keep greatly within the point of indirect debility, and, therefore, be ſafe; while the ſucceeding evacuation may reduce the excitement perhaps 10°, and bring it within the rage of predispoſition; and a new courſe, or a little prolongation of this, carry it down to the point of health, and finiſh the cure.

 his

his facts and all his theories, let him turn himſelf into all ſhapes, he will never produce a ſolid argument againſt this remedy. But what, again, is all this about? Will there never be an end of running from one extreme of error into the oppoſite? Shall no mean be found betwixt the Alexipharmac plan of cure, and and an equally bad or worſe one? If that doctrine heſitated not to preſcribe ſweating in the rage of a peripneumony, and that too by means of the moſt heating ſtimulant powers; does it therefore follow, that a plan of cure muſt be admitted, which rejects the certain and ſafe uſe of that remedy, when conducted by the moſt gentle means? If it was the opinion of Dr. Sydenham, that heat ſhould be avoided in the cure of ſthenic diſeaſes, *which was quite right*, as heat certainly encreaſes the excitement; are we, for that reaſon, to avoid that tolerable degree of heat, which accompanies a remedy the moſt powerful in reſtoring the healthy ſtate, and, thereby, deprive ourſelves of great benefit upon the whole? If ſuch perſons did not know, that ſeveral remedies diminiſhed excitement more powerfully than *any* one; and, if they were to be forgiven for that; were they alſo to be excuſed for

not

not ſeeing, what any emperic might have ſeen that is, that ſome things were of ſervice, and others of diſſervice; was that want not of genius, which is not required of them, but of common ſenſe, alſo to be pardoned? If thinking without a leader, and making any ſort of diſcovery, was too much, and not to be expected from them; is it not ſomewhat ſurpriſing, that out of a thouſand perſons, who had treated of every part of medicine, and entertained different ſentiments from one another, in ſome meaſure right, and, no doubt, wrong too, they could ſqueeze no information, but always trod in the footſteps of one ſingle man?

CCCCLXXVII. Sweat, therefore, after the management that has been mentioned, is to be excited, and ſo much the more determinedly, if there ſhould ſeem ſomething ſtill wanting to the complete return of health, ſome degree of ſthenic diatheſis ſtill remaining, and a ſpontaneous tendency to it ſhould appear.

CCCCLXXVIII. When the ſigns of a ſpontaneous ſweat ariſing are perceived, nothing more is to be done, but firſt to lay the clothes about the patient, remove the ſheets,

 put

put the blankets next to his body, guard againſt the approach of air, and keep up the diſcharge for a ſufficient length of time, at leaſt ten or twelve hours. If, by this management, there ſhall enſue a copious and univerſal flow of ſweat, there will be no occaſion for giving a medicine. After it has ſucceeded, and encreaſed the relief formerly procured; if it ſhould ſink in towards the end, it ſhould at laſt be ſupported by Dover's powder, or by laudanum alone, covering the body, ſo as that it may get as quickly as poſſible to the ſurface, till the expected benefit be obtained. And to this management it muſt be added, that, if a draught of cold water be ſometimes given, and then the body well covered up and properly managed, the buſineſs often ſucceeds to our wiſh. But, as in the other caſes, that belong to this part of our indication, the ſweating muſt then only be ſet on foot, when the mediocrity of the diatheſis, procured by the other remedies, will permit; ſo in the ſmall-pox and meaſles, becauſe there is occaſion for a certain time to allow the matter to paſs away, we muſt alſo keep that in our eye, and never be too early in making trial of this remedy. Laſtly, if the heat ſhould happen

to

to prove hurtful, if at any time the flow of the ſweat ſhould be attended with leſs relief, or with ſome inconvenience, it ſhould be immediately ſtopped: For it was not for no purpoſe, but for that of making the remedies ſupply the defects of one another, and of reducing the excitement more equally over the whole body, that a number was recommended.

CCCCLXXIX. In all the caſes of a violent diatheſis, all the remedies that have been mentioned, are, more or leſs, and differently on different occaſions, in proportion as the remaining part of diatheſis may require, each in a higher or lower degree, or in a larger or ſmaller quantity, to be brought into play, and the curative circle enlarged: And beſides them,

CCCCLXXXX. Some of ſlighter conſequence, ſuch acids and nitre; ſome of uncertain *uſe*, ſuch as leeching, cupping, and bliſtering, are mentioned, as of the firſt conſequence. Of theſe, the acids, in ſo far as they render the drink more agreeable, and, in an affection of the lungs, do not produce cough, and prove, in a certain meaſure, refrigerant, are to be permitted; and more certainly, if there ſhould be a deſire for them.

Every

Every body ſhould know, that the refrigerant power of nitre is leſs than is commonly thought. In rheumatiſm, and the ſthenic cynanche if the latter ſhould be unuſually ſevere, bliſters, leeches, and cupping-glaſſes, applied in the neighbourhood of the inflamed parts, may, in ſome meaſure, be of ſervice (*x*). Nor does there ſeem to be any reaſonable objection to the clapping a cap of recently dug-up earth upon the head in the caſe of phrenitis.

The other Part of the Indication of Cure.

CCCCLXXXI. To paſs over to the other part of the indication of cure (*y*): When there is a gentler diatheſis in the habit, as in the other phlegmaſiæ, and ſthenic affections, that have not been yet named *in the cure*; as in the mildeſt ſtate of eryſipelas, of the ſthenic cynanche, catarrh, ſimple ſynocha, the ſcar-

(*x*) All from refrigerant is an addition in theſe words: "In rheumatiſmo, et cynanche ſthenica ſi quando ſolito "gravior erit, veſicatoria et hirudines, vel conciſa cute "cucurbitulæ, juxta partem laborantem adhibita, com- "munem quodam tenus, curationem poterunt expedire. "Nec, quo minus in phrenitide pileum ex terra recens "effoſſa, capiti imponatur, objici poſſe videtur."

(*y*) CCCCLI.

let

let fever, and the mild ſmall-pox and meaſles; a ſmaller force of debilitating power is required; and, therefore, neither all the remedies that have been mentioned, nor in general ſo much of each, as in the other part are demanded.

CCCCLXXXII. In all theſe caſes, not even with the exception of rheumatiſm, which depends upon a very great diatheſis, bleeding is not neceſſary; and with the exception of that diſeaſe, bleeding, with any degree of freedom, is hurtful: For, when the excitement is not the greateſt, and, on the contrary, is moderate, ſcarce exceeding that degree that produces the prediſpoſition to other diſeaſes; in that caſe it is abſurd to make uſe of a moſt debilitating power, by way of a remedy, as if we had to combat a very violent diſeaſe. And, ſince the intention in bleeding is to prevent an ultimate exceſs of exciting power from producing a ceſſation of excitement in death, an event of which there is not the leaſt danger, in a moderate diatheſis, ſuch as that, which is the cauſe of the diſeaſes here in queſtion; for that reaſon, the cure muſt be adapted to the cauſe, and bleeding muſt be either abſtained

abſtained from altogether, or very ſparingly uſed.

CCCCLXXXIII. It is not, therefore, only in diſeaſes of debility, which belong to the other form (in moſt of which it has, nevertheleſs, been, and ſtill is, the cuſtom, to ſpill more or leſs of the vital fluid); but alſo in all the diſeaſes of this form, except the very violent ones, that the lancet is to be reſtrained.

CCCCLXXXIV. Though in rheumatiſm the diatheſis often runs conſiderably high, the uſual profuſe bleeding, is not, however, required. For, as every diatheſis is always greater in ſome parts than in any other equal one, ſo it is with the ſtenic diatheſis *in this caſe*; which is found much greater upon the ſurface of the body, than in any other equal ſpace within. And the reaſon is, that the moſt powerful noxious agent, heat, ſucceeding to cold, or ſo alternating with it, that its own ſtimulus is increaſed by its effect (z), directs its principal energy to the ſurface of the body. Hence, after exceſſive bleeding, the diſeaſe, notwithſtanding, often obſtinately recurs. The

(z) See XXXVII. and addition.

cauſe

cause of which fact, if the principles of this doctrine be well understood, cannot be obscure. Bleeding diminishes the sthenic diathesis chiefly in the red vessels, less in any of their extremities, least of all in the perspiratory vessels, and those disposed of in the tract of the muscles; and still less in the last, because the operation of the bleeding is counteracted by that of heat: Which is an explanation confirmed by the certain testimony of physicians; who often complain that their favorite remedy fails them.

CCCCLXXXV. Upon which account, sweating, which we spoke of *so* lately, is remarkably adapted to *the cure of* this disease: To it, therefore, after a previous bleeding to twelve ounces, and observing the rule of temperature and diet before directed, must we have immediate recourse, if the diathesis happens to be considerably violent, and is signalized by heat *of the body*, by pains raging most in the night time, and by a strong and hard pulse. In order to render the sweat universal, and of sufficient duration, it should be brought out by Dover's powder, or laudanum, *as before* hinted, and kept up for twelve hours in full flow, and then some hours longer, or till the abatement

abatement of the ſymptoms, in the form of a moiſture or free perſpiration, and repeated when the ſymptoms return. The reſt of the cure muſt be entruſted to low diet and an exact temperature.

CCCCLXXXVI. In this caſe, after the ſweating courſe, and alſo in that of a ſimple ſynocha, of the ſcarlet fever, of the ſthenic ſore-throat, of catarrh, eryſipelas, and the gentle ſmall-pox and meaſles, when the diatheſis is ſomewhat conſiderable, but far ſhort of that rage which conſtitutes the caſe of cure firſt taken notice off; we ſhould uſe either a very ſmall bleeding, and then chiefly the evacuations before-mentioned (*a*); then a ſlight and ſhort ſweat ought to be kept up not longer than eight or ten hours; and, during the whole time *of the cure*, we ſhould go on with abſtinence, weak drink, reſt of body and mind, and cold, unleſs in the time of ſweating, and even then, with as little heat as poſſible; and, finally, with tranquillity of mind, as theſe were formerly enjoined: The united uſe of which is perfectly equal to the removal of any of theſe diſeaſes; but there will not always be occaſion for them all.

(*a*) See CCCV.

CCCCLXXXVII.

CCCCLXXXVII. Often ſo gentle a diatheſis occurs, that one or two of them, once or twice employed, is ſufficient for the cure: So ſlight a diatheſis that is, in which, unleſs for a little at firſt, the ſhivering, langour, and then heat, is very moderate, pointing out a proportional ſlightneſs of diatheſis upon the ſurface; in which there is ſcarce any laſſitude, ſhowing the ſame moderation of diatheſis in the organs of voluntary motion; in which the vigour of the ſtomach remains, manifeſting a moderate exceſs of excitement in it; in which, in fine, the other functions, over the whole body are ſufficiently calm, and only ſuffer conſpicuouſly in the labouring part: In theſe caſes, often a ſingle purge with Glauber's ſalt, often, without that, cold, reſt, and abſtinence, have conducted the morbid excitement to its ſalutary degree. A thouſand times has the ſthenic cynanche, a thouſand times has catarrh and the ſimple ſynocha, nay eryſipelas itſelf with affection of the face, been in that way removed. And the ſcarlet fever is often ſo gentle as to yield to the ſame management.

CCCCLXXXVIII. In this way muſt a conſtant regard be had to the degree of excitement

ment and diathesis in the method of cure, and often terms must be disregarded. For, as it was with this view, that the simple synocha was before distinguished from the phrenitic, and the gentle erysipelas from the violent; so, it often happens, that catarrh rises to that magnitude that threatens or brings on a peripneumony, and that the latter proceeds with much more gentleness than usual. In which circumstances, it is the degree of excitement alone, that ought to govern the physician, without respect to names.

CCCCLXXXIX. Another useful caution here is, to judge of the state of the pulse, of the temperature upon the skin, and of the skin in other respects, with good sense, and due reflection upon these principles. The frequency of the pulse in all sthenic diseases is moderate: With that there is conjoined some hardness and fullness. Whenever, therefore, the pulse is very quick, it is to be suspected, that the sthenic diathesis has passed into the asthenic, the excessive excitement into a cessation of excitement, or that the disease has been sthenic from the beginning. To remove which doubt and ascertain the truth, the habit of body, the age, must be considered,

and an enquiry be made to know, whether the diſeaſe has been preceded, or not, by contagion. Heat of the ſkin is in common to theſe diſeaſes and fevers, which are diſeaſes of an oppoſite ſtamp, and therefore a doubtful mark. Which, as it depends upon an interruption of perſpiration, from whatever ſource, is never to be ſtrained into a proof of the ſtate of excitement. And, ſince dryneſs of the ſkin, which is in common to the ſame diſeaſes however different from each other, in the aſthenic diſeaſes depends upon debility; in order to know the amount of what that ſymptom means, the other ſymptoms and the exciting hurtful powers, ſhould be conſidered. In fine, the only enquiry ſhould be, whether the excitement is abundant or deficient, and all the ſigns ſhould be conſulted with that view; nor are we to judge raſhly of any peculiar form.

CCCCXC. When, therefore, the ſigns, that have been related, are compared with all the reſt and with the diatheſis, we are then to ſet about the antiſthenic or ſtimulant plan of cure. The violent ſthenic diſeaſes, which we firſt conſidered can ſcarce be confounded with the contrary ones; the more gentle are daily confounded. But, while it is eaſy to

 diſtin-

diſtinguiſh them from the aſthenic diſeaſes reſembling them; if, however, any perſon ſhould think the *marks of* diſtinction ambiguous, let him know, that, upon account of that gentleneſs, *though the diſeaſe under examination ſhould* be aſthenic, blood is not even to be let, much leſs *under the apprehenſion that they may turn out* as ſthenic; to which laſt ſo debilitating a power is deſtructive, as it has *ſo* often *already* been ſaid upon former occaſions; and, with that information, let him underſtand, that his method of cure *conducted* in that way, will be fenced and ſecured from all miſtake. For, if the diatheſis, though ſthenic, be ſlight, bleeding will often precipitate it into the oppoſite, and will at the beſt be uſeleſs (*b*). If, on the contrary, the diſeaſe that paſſes for a ſthenic one, ſhould, in its progreſs, ſhow itſelf an evident aſthenic one; in that caſe, every drop of blood that

(*b*) Suppoſe the diatheſis be two degrees above the higheſt of the points of prediſpoſition, at 57°; and bleeding to the degree of producing 35° of debilitating influence be employed; it is evident, the excitement will go down not only the 17° neceſſary to bring it to the point of health, but ſink to 22°, that is, 3° below the range of prediſpoſition to aſthenic diſeaſe, and therefore compleat the converſion of the ſthenic into an aſthenic diſeaſe.

may

may have been taken will go to the encreafe of the difeafe (*c*). Yet this pernicious and daily practice fends more men out of this world, then all the curfes of human life (*d*)

CCCCXCI. As abftinence, cold, and the management of the belly, are fufficient to prevent a gentle ftate of the fmall-pox; fo, when that proper preparatory plan has been neglected, and now a crowded eruption appears; befides thofe, trial muft be made alfo of the other remedies (*e*), except fweat. But fweat muft be avoided, becaufe the tendency of the ftimulus accompanying it, by increafing the fthenic diathefis on the furface, would be to check the perfpirable fluid, and detain the contagious matter under the fcarf-fkin, and produce that pyrexia, fymptomatic of the inflammation, which is called the fecondary fever. This particularity of cure is taken from the particularity of the fymptom juft now mentioned, and forms no objection to the principles of this work. In perfect confiftency with which, though there is all the proof that can be derived from fure practice,

(*c*) See CCLXIX. CCLXXXI. CCXC.
(*d*) See par. CCCCVI. towards the end.
(*e*) CCCCLIII. to CCCCLXVIII.

that the remedies we have mentioned are ſufficient; yet, before the eruption comes on, their is nothing can be objected either to ſweating or bleeding, as remedies in common to this with every other ſthenic diſeaſe (*f*). In fine, as the ſucceſs of low diet, cold and purging, in this manner, is certain; at the ſame time, the other remedies, that remove ſthenic diatheſis, in this caſe likewiſe operate to the ſame effect (*g*). It was proper to ſay ſo much for the ſake of ſhowing the unexceptional ſteadineſs and univerſality of the principles of this work. Nor are we to think, that the ſmall-pox and meaſles, differ from other ſthenic diſeaſes attended with pyrexia, but in the particularity of their eruption in running a certain courſe, and not admitting of an accelerated cure.

(*f*) The ſmall-pox is, in one word, to be treated as any ſthenic diſeaſe, according to its degree of morbid ſtate, and the eruption is only to be regarded during the period of its exiſtence, either with reſpect to the exception of ſweating then, or of any thing elſe.

(*g*) It is not, that low diet, cold, and purging, operate by any peculiarity, but becauſe they debilitate to the degree, and in the manner required, of the other remedies.

CCCCXCII. We are not to wait the arrival of the symptoms of debility, that follow a violence of diathesis, and threaten certain death by indirect debility, with the view, forsooth, that, when they have happened, we may cure them: On the contrary, they ought to be prevented by the early administration of the remedies, *now so* fully commented upon. If that should be omitted, the consideration of the diseases that will be the consequence, and which is altogether an asthenic consideration, must be referred to the asthenic form.

CCCCXCIII. As often as sthenic diathesis happens to be conjoined with the pyrexia, which is induced by the operation of stimulants, of acrid substances, of compression, of obstruction, and similar hurtful powers acting upon a sensible part, of which we have examples in gastritis, enteritis, nephritis, cystitis, hysteritis, hepatitis, or the inflammations of the stomach, of the intestines, of the kidnies, of the bladder of urine, of the womb, of the liver (*h*); the diathesis, because it aggravates the pyrexia, should be removed by its respective remedies, to wit, the debilitating

(*h*) See LXXXI. LXXXIII. LXXXV. LXXXVII.

 ones.

ones. And, when neither it nor the aſthenic diatheſis is preſent, nothing ſhould be attempted: But, if the aſthenic diatheſis ſhould be preſent, which very readily may happen; the ſtimulant plan ſhould be proceeded upon, to prevent a very bad diſeaſe (*i*). Nor, when that is as much as poſſibly attended to, are we to forget, that, in ſo doing, the principal affection is not touched; that, on the contrary, it is its effect, not its cauſe, that is tampered with; and that the full conſideration *of ſuch*

(*i*) As aſthenic diſeaſes to ſthenic ones are in the proportion of ninety-ſeven to three of the hundred; ſuch alſo muſt be the frequency of prediſpoſition to them: The inference from which is, that as we are ſeldom in the moſt perfect ſtate of health, and conſequently, for the moſt part, under ſome degree of prediſpoſition, all the chances are greatly in favour of that prediſpoſition being the aſthenic one. Hence, the impropriety of treating all local diſeaſes in the ſame way, and as if they were general ſthenic ones. Death has been too often the conſequence of that practice, when the local fault, for which it was intended, was no more, perhaps, than a thorn puſhed under a nail, a cut, or contuſion of a finger. In ſuch circumſtances, however fully the perſon may have lived, wine is withheld, fluid vegetable matter preſcribed, and the rotine of every ſpecies of evacuation gone through. Diſmal are the conſequences of gun-ſhot wounds on this plan of cure. Turn back to the paragraphs LXXX. and LXXXI. and the notes ſubjoined to them.

caſes

cases belongs to the local diseases, afterwards to be taken notice of.

CCCCXCIV. Besides all the remedies now mentioned, it is of advantage in every degree of diathesis to keep the mind easy and unruffled with passion or emotion; a practice that in the very high degrees of the diathesis is indispensibly necessary. Our attention will especially be directed to this particular, when we observe, that the stimulus of thinking and of any passion, carried to a great height, has had a share in the production of the disease.

CCCCXCV. In mania, therefore and pervigilium, this direction must be particularly, and as much as possible, attended to. In the latter of which diseases, thinking, and every state of commotion, and more certainly an habitual practice in them, must be shunned, especially before going to bed. When the patient is resting there, he should have stupid books read to him, all inordinate desire, the propensity to revenge, the remembrance of every degree of criminality, of which he may have been guilty, should be diverted from his recollection (*k*).

(*k*) See above CCCCXXXIII.

CCCCXCVI. That fact of great consequence, to give corroboration to this whole doctrine, is confirmed by this other, that the same things, which are serviceable in pervigilium, or the morbid watchful state, are also serviceable in mania, or madness, only administered in a higher degree, as that is a disease of a higher degree of excitement. Thus, it is not ease and tranquillity of mind that are to be prescribed here, both of which are quite gone, but a state opposite to that high commotion *of spirits* and irregular vigour in the exercise of the intellectual function: And, as an excessive energy of the intellectual powers, or of the animal spirits, or both, are the most noxious powers in this case; for that reason, the patient should be struck with fear and terror, and driven, in his state of insanity, to despair: As a remedy against the great excitement of the organs of voluntary motion, the labour of draft-cattle should be imposed on him, and assiduously continued; his diet should be the poorest possible, and his drink only water (*l*): In water as cold as possible, the patient should be immersed, and kept under it,

(*l*) See CCCXXVIII, CCCCXXX. CCCCXXXV. CCCCXXXVI.

covered

covered all over, for a long time, till he is near killed.

CCCCXCVII. If, in phrenitis the brain, in peripneumony the lungs, in rheumatiſm the external joints, poſſeſs more diatheſis, than any other part; why may not mania and pervigilium conſiſt more in an affection of the brain, upon which the principal noxious powers act, than of the other parts, over which the influence of thoſe powers is leſs conſiderable? Laſtly, ſince remedies, the firſt action of which falls upon other parts, are of ſervice in thoſe diſeaſes (*m*), that proves, that not even in them, where you might moſt be diſpoſed to believe it, the whole morbid affection depends upon the part conſpicuouſly affected; but that the whole body is concerned in it, that the excitability is one uniform undivided property over all; that the force both of the exciting hurtful powers and of the remedies, is directed to the whole, with the inequality ſo often mentioned (*n*); and that the foundations of this doctrine are ſure and ſtable.

(*m*) Part I. Chap. II.

(*n*) Part I. Chap. IV.

CCCCXCVIII. As theſe are the principal hurtful powers in mania and pervigilium, and the brain principally affected; ſo, in obeſity, the hurtful powers moſt conſiderable are animal food (*o*) and reſt, or ſedentary life; in conſequence of which laſt, the ſtimulus of exerciſe, which, by wearying and fatiguing the body, tends to indirect debility, is underſtood to be wanting. But, ſince, in conſequence of uſing the ſame food, both in quality and quantity, and the ſame *indulgence in* reſt *and eaſe*, ſome perſons become fat, others continue lean; from thence it is aſcertained, that all the digeſtive powers have more force in the former, than in the latter, and, conſequently, that the other exciting hurtful powers have contributed to the effect, and that a proportional excitement follows. Of the hurtful powers, that belong to this place, an eaſy exerciſe of the intellectual faculty, *and* tranquillity of mind, which are moderate ſtimuli, favour

(*o*) Becauſe no effect can ariſe without a cauſe, the exciting powers, therefore, muſt here have operated with more force, than in the other caſe; and if it ſhould be objected, that the circumſtances in both caſes were equal, the difference then muſt be ſet to the account of the greater vigour of the excitability in the caſe of obeſity.

obeſity;

obesity; over-strained thinking, and habitual indulgence in any passion, such as that of anger, *the repetition of which constitutes* ill nature, oppose it. Corporeal motion, which diminishes the quantity of fluids in the system, and, as often as it is considerable, proves fatiguing and debilitating, opposes it. Equally unfavourable to it is hard drinking; which, in a similar manner, wears out the excitement, by constantly wasting the excitability from the high degree or long continuance of its stimulus. On the contrary, the powers that favour it, are those that act gently, and with some excess; but never attain that high degree of activity, that inclines to indirect debility: They are powers that go on softly and pleasantly, that particularly keep up moderation in the perspiration, and thereby fill the vessels with blood; but, because motion is avoided, they do not very much encrease the excitement of the vessels, and by means of the tranquillity of motion *kept up in the latter*, allow a fluid, that would otherwise pass off by the external pores of the surface, to turn aside into the cells of fat. Hence, though, as it has been said before, an abundance of blood is indeed a very great stimulus; yet, without other stimuli,

muli, and that moſt powerful one, which muſcular motion affords; it is evident, that a conſiderable degree of ſtimulus can be borne without any conſiderable diſeaſe, and that it always produces a prediſpoſition to ſthenic diſeaſes, but does not immediately bring them on. Hence, it is underſtood, what place in the ſcale of exceſſive excitement, or of ſthenic diatheſis, obeſity holds; what the degree of ſtimulant power is, and what the ſtimuli in particular, are that produce it.

CCCCXCIX. As the degree of curative force muſt be accommodated to the degree of force in the cauſe (*p*); *hence it may be obſerved*, that for the cure alſo of this diſeaſe the common indication is ſufficient (*q*); that is, that the exceſs of excitement muſt be reduced to the ſalutary degree, and a remedy oppoſed to every hurtful power, equal to the removal of it.

D. In this caſe, therefore, as food is the principal hurtful power, leſs of it ſhould be given, and more exerciſe engaged in. Theſe are ſufficient for the cure (*r*).

(*p*) See CIX.
(*q*) XLVIII. CCCCLIII.
(*r*) CCCCXCVIII.

DI.

DI. But, for the ſake of bringing both *further* confirmation, as well as illuſtration of this doctrine; it is to be obſerved, that all the powers, which very much affect the excitement, and in a greater degree, than the hurtful power of this diſeaſe mentioned above, and that have a tendency, *by their ſtimulant operation*, to indirect debility, have the ſame effect; that they either prevent or cure obeſity, and continue productive of that effect, till *they induce* that degree of meagerneſs which is connected with debility.

DII. The beſt method of lowering the diet, is to combine a quantity of vegetable matter with a moderate portion of animal. The next *rule* to that, is to refrain from the latter, and uſe the former in greater abundance. The firſt of theſe is ſuitable to all ſuch perſons as are liable to diſeaſes of debility, ſuch as the gout, the indigeſtion that after a long time ſucceeds to luxury, aſthma, epilepſy, and ſimilar others. The latter management is more accommodated to thoſe, who otherwiſe enjoy great vigour, are under prediſpoſition to ſthenic pyrexia, and in the flower of their age. But, it is not, even in the latter ſtate of the body, to be proſecuted, unleſs for a time;

becauſe,

becauſe, ſuch is the debilitating influence of that practice, that, while it is ſufficient to remove any degree of obeſity, eſpecially with the addition of exerciſe, it is found to have ſignal efficacy in producing aſthenic diatheſis, and all the diſeaſes depending on that.

PART

PART THE FOURTH.

THE SECOND FORM OF GENERA DISEASES.

OR

THE ASTHENIC DISEASES.

CHAP. I.

DIII. THE form of aſthenic diſeaſes, and which is to be called aſthenia, for the ſake of diſtinguiſhing it from the form of ſthenic diſeaſes, which is called ſthenia, is a ſtate of the living body, in which all the functions are more or leſs weakened, often diſturbed, almoſt always with a more

a more conſpicuous affection of ſome *function*. In the treatment of which, that order will be obſerved, in which the progreſs from the ſmalleſt diſeaſe *of this kind* to the greateſt, through all the intermediate degrees, is to be followed out.

DIV. *In* this *part of our ſubject*, there occurs a great variety of ſymptoms; of which, becauſe it is without meaning, and even miſleading, no uſe is to be made in marking the ſcale of diſeaſes. But, for the ſake of placing what is about to be delivered in a clearer, if not a more ſpecious, point of view, we ſhall begin with a ſimple enumeration of the principal diſeaſes to be afterwards fully treated of.

DV. The aſthenic diſeaſes are macies, inquietude, or reſtleſſneſs without ſleep, the aſthenic amentia, the ſcabby eruption, the ſlight diabetes, the aſthenic ſcarlet fever, the rickets; the hæmorhæae, or general bleeding diſcharges, ſuch as menorrhæa, or a morbid exceſs of the menſes, epiſtaxis, or bleeding from the noſe, hæmorrhois, or the piles; and alſo three morbid ſtates ſeemingly in appearance oppoſite to theſe, the loitering, impaired, or ſuppreſſed menſtruation; next come thirſt,

thirst, vomiting, indigestion, diarrhœa, or loose belly, and colic without pain; after these the affections of children, as the worms, the general consumption, called tabes, dysentery and cholera in the gentle state of these two; angina, the scurvy, the gentle hysteria, rheumatalgia, asthenic cough, cystirhæa, or mucus discharge from the bladder; the gout of strongish persons, asthma, cramp, anasarca, dypepsia with pain, the violent hysteria, the gout of weakened persons, the hypochondriasis, dropsy, chincough, epilepsy, or the falling sickness, palsy, the lock-jaw, apoplexy, tetanus; lastly fevers, as the quartan, tertian, and quotidian, *intermittents* or *remittents*, dysentery, and cholera both in their violent degree, synochus, simple typhus, the gangrenous sore throat, the confluent small pox, the pestilential typhus, and the plague.

DVI. This scale of asthenic diseases is to be understood *in* this way, that those diseases, which in their most usual state are slight, and claim a higher place in the scale, are sometimes more, sometimes most, violent; and those, that in their most common state are severe, such as the gout of weakened per-

ſons, the peſtilential fevers, and the plague itſelf, ſometimes proceed with the greateſt gentleneſs (*a*).

DVII. The affections of parts, which often accompany thoſe diſeaſes, ſuch as ulcer, tumor, encreaſed excretion, bleeding diſcharge, inflammation, ſpaſm, convulſion, point out indeed ſome degree of debility *as their cauſe*, but in ſuch ſort that the ſame degree may happen without them. Hence, becauſe it is the influence of debility that is fundamentally regarded in this ſcale; with the diſeaſes, that are often conjoined with theſe affections, others, without them, as hyſteria and the cramp are blended; and, with the caſes that are accompanied with ſpaſm and convulſion, dropſy is conjoined, by keeping to the idea of an equal degree of debility; *and all* this without any regard to remarkable ſymptoms, but keeping the degree of debility only in view. Neither is the violent cholera kept back from its place among fevers, which laſt are diſtinguiſhed by failure in the intellect and affections of the head, becauſe it ſhews a degree of debility equal to the febrile. The idea in proportioning this diviſion is to ſhow,

(*a*) See par. CCCCL.

that

that true morbid energy does not conſiſt in an affection of any parts, but of the whole body; and that the *reſtoration of* health is not to be attempted by a change of *the ſtate of* parts only, but, *without excluding that*, by a change of the ſtate of the whole ſyſtem.

Of Leanneſs.

DVIII. Leanneſs is an aſthenia, leſs diſcernible in the other functions, but evident from the weakneſs of the digeſtive function; in conſequence of which, the ſyſtem, though receiving proper aliment, does not become plump.

DIX. Since the cauſe of this diſeaſe is debility, both in the reſt of the ſyſtem, and in the ſtomach and other organs of digeſtion; it thence *follows, that* the general indication for the cure of it, ſhould be chiefly directed to the moſt languid part, that is, the organs of digeſtion and the perſpiratory veſſels. More nouriſhing food, therefore, ſhould be uſed, leſs labour undertaken, and moiſture on the ſurface, or too free perſpiration, ſhould be checked by more reſt of body, by proper geſtation, and rubefaction, and a plan, quite

contrary to that which is ſuited to the cure of obeſity ſhould be purſued.

Of Reſtleſs Watching.

DX. In the aſthenia called inquietudo, or reſtleſs watching, the other functions are under ſome degree of languor, and the patient is affected with a conſtant neceſſity to change his poſture, and toſs about his limbs without being able to fall aſleep.

DXI. As the cauſe in this caſe, in the ſame manner as in every other general diſeaſe, is univerſal over the ſyſtem; ſo it affects the organs of voluntary motion, and the brain in particular, with the inequality *ſo often* formerly mentioned (*b*): Conſequently, *to remove the diſeaſe*, ultimate exceſs in either mental labour, or exertion in any paſſion, as well as the oppoſite extreme of deficiency *in either*, ſhould be avoided; and that ſtimulus of both, which is agreeable, ultimately exceſſive corporeal labour when it has proved hurtful, as well as deficient when it has had a concern in the cauſe, ſhould be guarded

(*b*) See par. XLIX.

againſt

againſt; and the proper *medium betwixt the extremes of exceſſive activity and indolence* reſtored: Or the diſeaſe ſhould be repelled by wine, and the other ſtimuli have, each its proportion, in the cure.

Of the Scabby Eruption.

DXII. In the ſcabby eruption, the face is pale, the ſkin diſcoloured, dry, lank, and variouſly disfigured with puſtles; there is a lowneſs of ſpirits, and the functions of the body weak and ſluggiſh.

DXIII. In this caſe, while the debility is univerſal, there is a prevalence of it in the perſpiratory veſſels. And, therefore, the chief parts of cure are, together with the remedies, *the operation of which is* directed to the whole ſyſtem, ſuch as nouriſhing food, ſtrong drink, to ſupport the perſpiration by its reſpective remedies; to bathe the ſurface of the body in tepid water, to render it acceſſible to air, to order clean linen for the patient, and every thing clean about his cloaths.

Of the Gentle Diabetes.

DXIV. In that aſthenia, which is named the gentle diabetes, there is an exceſs in the quantity of urine diſcharged, but the profuſion is not immoderate as in the moſt violent caſe of the ſame name. The organ of reſpiration labours under the ſame weakneſs and ſluggiſhneſs, as in the ſcabby eruption.

DXV. To remove this affection much more frequent than it has been hitherto believed, the ſyſtem ſhould be ſtimulated by food (*c*), by ſtrong drink (*d*), and by proper exerciſe (*e*), ſuch as is neither immoderately exceſſive, and therefore debilitating, nor deficient in degree, and therefore, not ſupplying enough of ſtimulus: And, above all things, the perſpiration ſhould be ſuſtained. The contrivances for checking the flow of urine, which have no exiſtence, are to be paſſed from.

(*c*) See par. CCLXVI.
(*d*) See CCLXVIII.
(*e*) CCLXX.

Of the Rickets.

DXVI. The rickets is an aſthenia; to the general ſymptoms of which are added an unuſual bulk of the head, eſpecially the fore part of it, and likewiſe of the knees and abdomen, a flatneſs of the ribs and meagerneſs.

DXVII. The rickets is a diſeaſe of children, chiefly ariſing from uncleanlineſs, want of dandling or exerciſe, cold, either without moiſture or with it, food not giving ſufficient nouriſhment, and bad air.

DXVIII. For its cure the common aſthenic indication muſt be employed; remedies, of an opppoſite nature to the hurtful powers that excite the diſeaſe, muſt be looked out for; the ſurface of the body ſhould be kept clean (*f*), the perſpiration ſhould be carefully reſtored by the ſtimulus of pure air and of heat; the child ſhould be more carefully dandled, and kept much in the open air, animal food ſhould be adminiſtered, vegetable withheld, and ſtrong drink allowed (*g*).

(*f*) See DXIII.
(*g*) See CCXCV. CCCIII.

Of Retarded Menſtruation.

DXIX. Retarded menſtruation is alſo an aſthenia: In which, beſides this diſcharge not making its appearance at that time of life, when it ſhould, other evidences of debility, ſuch as a ſlender make of body, weakneſs, laxity of habit, want of appetite, or a craving for things not alimentary, paleneſs of the ſkin, and ſimilar ſymptoms, appear.

Of Impaired Menſtruation.

DXX. Impaired menſtruation is that ſtate of aſthenia; in which after it has appeared, and the flow continued for ſome time, the diſcharge is made in too ſparing quantity, or after too long intervals of time, with other ſigns of weakneſs accompanying it.

Of the Suppreſſion of Menſtruation.

DXXI. Suppreſſion of menſtruation is that degree of aſthenia, in which the diſcharge is totally ſtopt at any period betwixt their natural commencement

commencement and the time when, in the courſe of nature, they ceaſe altogether.

DXXII. An enquiry muſt be made into the cauſe of natural menſtruation, before *it would be proper to enter upon* that of the retardation, or deficiency, of the diſcharge in any of its degrees.

Of the Cauſe of Menſtruation.

DXXIII. The cauſe of menſtruation is a conformation of the veſſels that pour out the blood *in this diſcharge*, taking place at a certain time of life, that is, about the age of puberty, and a ſtimulant energy in women, more powerful than in the females *of the other ſpecies of animals*.

DXXIV. Of other animals there are very few, the females of which undergo any ſort of menſtruation out of the venereal orgaſm.

DXXV. As all the veſſels are gradually unfolded in the courſe of the growth of the body, ſo the ſame thing happens to the genital and uterine veſſels, but laſt of all to theſe. The ends of the latter, terminating, on the ſides of the womb about the age of puberty, are at laſt ſo very much expanded, as now to tranſmit

tranſmit firſt the ſerous part of the blood, and then, after an effort kept up for ſome time, paſs to formal blood.

DXXVI. At this time of life a great change over the whole ſyſtem takes place. Now the deſire for coition, a ſtimulus, never experienced before, produces a commotion over the whole body; and, in preference to other parts, in the genitals of both ſexes, in the female, over the whole region of the ovaria, womb, and vagina: By this ſtimulus, the uterus, its ſeat, being nearly inceſſantly ſolicited, is the more powerfully affected, the more there is of excitability, hitherto acted upon by no ſuch ſtimulus, exiſting in the ſyſtem. Hence, among other organs, the muſcular fibres of the next veſſels, as well as the nerves interwoven with them, undergo the higheſt degree of excitement: This excitement, encreaſing over the whole ſyſtem, again encreaſes that in the uterus: The mutual contact of the ſexes, whether in kiſſing, in ſhaking hands, or otherwiſe, fires both ſets of genitals, and the uterus in a remarkable manner; but the actual embrace produces the higheſt degree of that effect. The remembrance of each embrace remains, renews the

dear

dear idea of the delightful ſcene, and continues more or leſs to excite the uterus.

DXXVII. This new affection is further cheriſhed and nouriſhed by every ſtimulus that is uſually applied to the ſyſtem: Hence, in the abſence, in the preſence, of the beloved object, at all times generally, ſcarce with the exception of *that which paſſes in* dreaming, a ſtimulus ſo ſteady, and the more powerful, that its novelty implies, that the excitability in this caſe is entire, rouſes the fibres of the veſſels, already ſufficiently unfolded, to violent contractions. The blood is carried into the region of the uterus with the greateſt rapidity, a rapidity momentarily encreaſed, in proportion as the blood, by powerfully diſtending the veſſels, and agitating them by its impetuous flow, ſtimulates the fibres more and more, and thereby encreaſes the activity by which it is driven on. This is the firſt cauſe of menſtruation: In that way, the two circumſtances, a ſufficient enlargement of the diameters of the veſſels, and the ſtimulus acting more powerfully, from its novelty, upon the unwaſted excitability (*b*), are ſufficient for the whole buſineſs.

(*b*) See DXXIII.

DXXVIII. This ſtate is not inconſiſtent with other ſtates of the body, but bears an analogy to ſome well known ones: Accordingly, different veſſels, from the *mere* difference of their diameters, are ſubſervient to different purpoſes: The perſpiratory veſſels are deſtined to the tranſmiſſion of a vapour, the excretory veſſels of the alimentary canal to that of a thin fluid, the renal veſſels to that of a groſſer one; ſo as to take off our ſurpriſe at finding veſſels fitted, by their degree of diameter, for the purpoſe of tranſmitting red blood.

DXXIX. The reaſon that the females of other animals do not menſtruate but in their orgaſm, and not at other times, is, that it is only at certain times that they are expoſed to that energy of ſtimulus which produces menſtruation.

DXXX. How much is owing to the ſtimulus juſt now mentioned (*i*), in the production of menſtruation, is further evident from the following chain of facts: Which are, that, the leſs addicted to love women are, the leſs they menſtruate; the more they give way to that paſſion, the freeer do they experience this

(*i*) See DXXIII. DXXVI.

discharge

difcharge within certain boundaries; that, before puberty, and after the time of life when menftruation ceafes (which are the two periods, at which the fitnefs for effective love has not yet commenced, or is now paffed,) the menftrual difcharge is conftantly wanting; that the privation of enjoyment, which, by *its* debilitating *effect*, produces chlorofis (*k*) and other fimilar difeafes, is remarkable for bringing on a menorrhœa, or a retention of menftruation; and, finally, that girls, who are of a forward growth, of great ftrength, and large limbs, and confequently fooner ripe for love, are *alfo* more early in menftruation; while thofe, who are weakly, puny, and of a fmall fize, and, confequently, later in attaining to the period of puberty, are proportionally late in attaining the firft menftrual difcharge. Laftly, if, like all the other functions, that of love is limited at the fame time by its duration and degree; and if, as the commencement of the love embraces is more or lefs early, it is proportionally more early or late in coming to its final termination, and if the duration of menftruation does not ufually exceed that period; that fact alfo, *which it certainly is*, added to thofe above, gives weight to our conclufion, and

(*k*) or the green ficknefs.

fhows,

ſhows, in a clearer point of view, how much menſtruation depends upon the venereal emotion. It is to be aſſerted, therefore, again (*k*), that, beſides the conformation of the veſſels, ſuited to *the function of* menſtruation, and the ſtimulus which has been mentioned (*k*), there is occaſion for no other *circumſtance to explain* either the commencement, eſtabliſhment, or continuation, of the menſtrual diſcharge.

DXXXI. The cauſe of full menſtruation, and that of a moderate degree of it, happening within the boundaries of health, is the ſame, only differing in degree; the degree of the latter being ſmaller, and that of the former greater.

DXXXII. And, as the ſtimuli, mentioned above, explain, why women menſtruate more than the females of other animals; ſo their immoderate operation upon women ſerves to ſhow, why *their effect*, the menſtrual diſcharge, becomes greater than natural (*l*).

(*k*) DXXIII. DXXVI.

(*l*) Women menſtruate more than other females, becauſe they are ſubjected to a higher degree of the ſtimulus, which is its cauſe; and ſuch women as are expoſed to more of the ſame ſtimulus than others, will alſo experience more of the effect, preciſely upon that ſame principle.

DXXXIII.

DXXXIII. The ſtimuli that produce abundant menſtruation, ſhort of morbid ſtate, are unchaſte ideas, and a high energy of paſſion. In this way, the influence of reading to one's ſelf, or to others, of converſation, of pictures, contrived to kindle up luſtful appetite, and the uncovering of parts that modeſty conceals, which all produce a lively impreſſion on the imagination of the thing ſo much deſired; can be indiſtinctly felt by none perhaps but eunuchs. The ſame is the effect of nouriſhing food, and generous drink, and high ſeaſoning; and hence the proverb, without meat and drink love ſtarves: Likewiſe, that degree of exerciſe, or *even* labour, that does not prove fatiguing, but that keeps within the boundary of ſtimulant operation; as alſo an abundance of blood, both from that circumſtance and from rich diet; laſtly, frequent and ardent dalliance, or *inconceſſa hujus imitatio*; all theſe, encreaſe the menſtrual diſcharge, in proportion to the high degree of their ſtimulus, but ſtill do not carry their effect to morbid exceſs.

DXXXIV. The ſame concluſion applies to the effect of theſe ſtimuli, which was formerly applied to an over-proportion of blood producing

producing ſthenic diatheſis: For the ultimate end of all the ſtimuli, that produce exceſſive menſtruation, is ſuch, that, if exceſſive menſtruation and an encreaſe of love be the conſequence of the exceſs of the ſtimuli, one or other of the following muſt be the effect; that is, it will either be ſuch as remains within the latitude of health, or ſuch, as firſt produces ſthenic diatheſis, and then, in a higher degree of it, runs rapidly into indirect debility.

DXXXV. That that is the fact, is proved by the hurtful powers that produce exceſſive and morbid menſtruation; and by remedies, that are ſtimulant and ſuited to fill the veſſels, removing the diſeaſe according to our late diſcovery; and alſo by the unfortunate effect of the debilitating evacuant plan of cure in the ſame diſeaſes.

DXXXVI. As it is ſtimulant operation that produces both proper menſtruation and that which goes to a little exceſs; ſo, when once menſtruation is eſtabliſhed, the conformation and ſtimulus, that have been mentioned, remaining, are ſufficient to ſupport it. The ſame operation is renewed during every interval of menſtruation: The ſtimulus acts and quickens the motion of the blood in every

part,

part, but chiefly in that where it is moſt powerful and moſt required, that is, in the region of the womb: The blood thrown into quick motion, and ruſhing with a more rapid flow, encreaſes its cauſe, the ſtimulus: And, as this mutual ſtimulus continues inceſſantly to affect the women through the whole interval, when they are allowed ſcope of love; the uterine veſſels are gradually unfolded, till at laſt, within three weeks, or a lunar month, they are opened to their ultimate extremities: And, when the fluid, firſt ſerous for a little, and afterwards ſanguine, and afterwards ſerous again for a little, has flowed one, two, or three days, in healthy perſons, the veſſels are at laſt ſhut up.

DXXXVII. During the whole time of this proceſs, the more excitability there is, and conſequently at the beginning of each menſtrual effort, the more violently the ſtimulus acts, and p oduces proportionally more excitement: And it has, from this time, always leſs and leſs effect to the end, in proportion as the excitability is more waſted; though, till the excitability, in ſo far as it has a relation to the ſtimulus, is altogether exhauſted, the ſtimulus always adds ſomething to the ſum of excite-

ment (*m*), though conſtantly leſs and leſs. The ſame is the explanation of the operation of food, of drink, and of all the exciting powers.

DXXXVIII. As what has been ſaid of the ſtimulus, productive of menſtruation, is conformable to the effects of all the other ſtimuli; the ſame is its conformity to the whole ſum of menſtrual effect from the beginning to the end of the proceſs. Thus, in the beginning of that long period, the force of ſtimulus is far the greateſt, upon account of its novelty, and the unwaſted ſtate of excitability that relates to it. At this period, above all others, love in perſons in health is exquiſite; and, in conſequence of the ſtimulus which excites it, menſtruation, when once eſtabliſhed, is moſt exactly performed; that is, it does not, either from deficiency or exceſs, deviate into morbid ſtate.

DXXXIX. But after the beginning of this function, and when now the office of menſtruation is eſtabliſhed; becauſe in this, as well as every other function, the excitability is gradually diminiſhed in the progreſs of life, the ſtimulant power alſo has gradually leſs,

(*m*) See XXXVI.

and,

and, at laſt, no effect: Conſequently, in the ſame gradual way, the power of love in women, and, in proportion, that of menſtruation, is diminiſhed, and at laſt altogether extinguiſhed.

DXL. While both the faculties, that of love as well as that of menſtruation, in this way decreaſe from the beginning to the end; ſo, menſtruation is often interrupted, in pregnancy, in ſuckling, in the diminution or ſuppreſſion of menſtruation. This interruption in the two former is natural, and ſuitable to health; *but* in the diminution or ſuppreſſion of the menſtrual evacuation, it becomes morbid.

DXLI. Since the ſtimulus with the conformation of the veſſels is the cauſe of menſtruation, and the latter depends upon the former; ſo again the defect of the ſtimulus, and, therefore, of the conformation, produces both the retardation, diminution, and, at laſt, the complete ſuppreſſion of the diſcharge.

DXLII. Whether ever the defect of menſtruation, like that of perſpiration, or of an internal excretion, as that in the fauces and alimentary canal, is ſometimes to be imputed to ſthenic diatheſis, is uncertain, for this reaſon; that, while the diameters of the ſmall

veſſels on the ſkin and in the inteſtines are more nearly allied to ſuch a contraction for a reaſon *formerly* aſſigned (*n*); ſo great a force of excitement, ſo high a degree of ſthenic diatheſis, as would be ſufficient to ſhut up veſſels deſtined to the tranſmiſſion of blood, is not eaſy to be conceived. And the doubt is further encreaſed by *a certain fact*; *which is*, that both in the retardation of the menſtrua, and in all the degrees of their diminution to their total ſuppreſſion, when local affection is out of the queſtion, there are evident proofs of a debilitating cauſe.

DXLIII. To aſcertain that fact, which is of the greateſt conſequence for this reaſon, that it directly intereſts the method of cure, and, if not explained, would leave a gap in our principles; *we have to obſerve*, that, as ſome men, in conſequence of the ſtimulus of exceſſive love, in the caſe of a moſt beautiful woman being the ſubject of it, have, by means of ſthenic diatheſis, been ſo inflamed as to fall into a temporary fit of impotence, and been cured by bleeding; ſo, beſides that

(*n*) LVII. LXII. CXII. CXIII.

that

that is a rare fact (*o*), it is not very probable, that the patulous uterine vessels can be so contracted in their diameters, as to be incapable of transmiting their fluid. Nay facts contradict it: The retardation or deficiency of menstruation receive a temporary alleviation from the debilitating plan of cure; but the discharge is not usually also brought back, on the contrary it is more kept off: But allowing an over-proportion of blood and an excess of stimulus to be the cause of the first deficiency of menstruation, after it has been removed by bleeding and the rest of the debilitating plan of cure, can it again be the cause of a disease, which resists a degree of evacuant and debilitating plan of cure, that would cure ten peripneumonies? And since any stimulus, as well as *that of* an over-proportion of blood, may, from its excessive force, go into indirect debility; why may not the same thing happen in a disappointment in love, and first deficiency of menstruation; and, in both cases, atony, ushering in manifest debility, and not excess of tone, be the cause? As peripneumony, where the over-proportion of blood and sthe-

(*o*) I remember one instance in Dr. Whyte, and I think I have only heard of another.

nic diathesis is by far the greatest *that ever happens*, in consequence of indirect debility passes into hydrothorax; why may not a similar cause in this case produce a similar effect?

DXLIV. The cause, then, of deficient menstruation, whether partial or complete, is a languid excitement over the whole body, especially in the uterus, from a deficiency of the stimulus of love (*p*), and of all those stimuli that support it (*q*), and from a penury, or under-proportion of blood.

DXLV. That that is the fact, is proved by the hurtful powers mentioned in the retardation of menstruation, and other debilitating ones in every deficiency of that discharge, producing each disease; it is proved by the stimulant and filling plan of cure removing it, and also by the hurtful effect of the debilitating plan of cure (*r*).

DXLVI. The remedies for the cure of retarded menstruation are, rich food, generous drink, gestation, exercise accommodated to the strength, pediluvium and semicupium, or

(*p*) DXXIII. DXXVI. DXXIX.
(*q*) DXXVI. DXXVII. DXXXII. DXXXVII.
(*r*) DXXXV.

the

the warm bath of the under-extremities, and gratification in love (*s*).

DXLVII. The ſame remedies, are required for the ſuppreſſion, and the ſame, but inferior in their degree of force, for the diminution of menſtruation: When there is an unuſual force of the diſeaſe, either in degree or duration, we muſt have recourſe to the aſſiſtance of the diffuſible ſtimuli.

Of Menorrhœa, or the exceſſive Diſcharge of Menſtruation.

DXLVIII. Menorrhœa is an effuſion of blood from the uterus, or an over-copious menſtruation, or too long a continuance of it in a more moderate degree of the exceſs, accompanied by all the ſymptoms of aſthenia.

DXLIX. This diſeaſe is occaſioned not by an over-proportion of blood, not by a vigorous ſtate of body, but by an under-proportion of the former, and an exhauſtion of the latter. The hurtful powers, therefore, that produce it, are food not nouriſhing enough, or too ſmall a proportion of what is ſo,

(*s*) DXXVI.

watery drink, or that over-proportion of pure ſtrong drink that produces indirect debility, exceſſive heat, or cold not prevented from its debilitating operation by any ſtimulus, and ſalacity.

DL. Its remedies are the reverſe of the hurtful powers; rich food, generous ſtrong drink, heat acting within its ſtimulant range, cold kept from direct debility by the ſtimulus of heat and other ſtimuli, and gratification in love.

DLI. The effect of the hurtful powers and remedies of which we have ſpoken, that of the former in producing, and that of the latter in removing, the diſeaſe, and the failure in ſucceſs of the debilitating plan of cure, all confirm the fact.

Of Epiſtaxis, or bleeding from the Noſe.

DLII. Epiſtaxis is an aſthenia; which, beſides the general ſymptoms of the latter, is diſtinguiſhed by bleeding from the noſe, without any force behind, an affection troubleſome at any age, but particularly to young perſons under a rapid growth, and to enfeebled old age.

Of

Of Hæmorrhois.

DLIII. The characteriſtic of hæmorrhois, or the piles, added to other ſigns of aſthenia, is a flow of blood from the anus, or the parts around it.

DLIV. The ſame thing, nearly, that has been ſaid of menorrhœa, is to be ſaid of the hurtful powers and remedies of this diſeaſe.

DLV. The cauſe of the piles is manifeſt, from the hurtful powers producing it, the remedies removing it, and the unhappy effect of the common aſthenic plan of cure; that is to ſay, it is debility of the whole body, from the deficiency of other ſtimuli, and chiefly that of the blood (*t*): Which debility, while it relaxes all the veſſels, and impairs their tone, produces that effect, in a ſpecial manner, upon the labouring veſſels. The reaſon of which is, that, in conſequence of the inequality ſo often mentioned, the chief prevalence of the cauſe operates in the ſeat of the urgent ſymptom (*u*). Nor is it to be thought wonderful,

(*t*) See par. DXLIX.

(*u*) See XLIX. L. LI.

that

that the blood ſhould flow through the veſſels of the uterus that are patulous, and in the habit of pouring out blood, through the pendulous hemorrhoidal veſſels, and thoſe of the noſe, which are delicate, and weakly ſupported, in preference to others. In this caſe plethora, which has no exiſtence (*x*), is equally unneceſſary to our reaſoning (*y*).

Of Thirſt, Vomiting and Indigeſtion, as well as the the Kindred Diſeaſes of the Alimentary Canal.

DLVI. There is a very frequently occurring affection, beginning with thirſt and proceeding to vomiting (*z*). It often proceeds no farther than thoſe ſymptoms; it oftener uſhers in the moſt ſevere affections, ſuch as ſometimes dyſpepſia, or indigeſtion, ſometimes colic, ſometimes the gout, ſometimes proper fevers, and many other aſthenic diſeaſes. Its moſt frequent ſource by far is weakneſs, being the attendant ſometimes of too long ſuckling, ſometimes of the diarrhœa incident to women

(*x*) See par. CXXXI. CXXXIV. and the addition.
(*y*) CCXXXII.
(*z*) CLIX. CLXXXV. CLXXXVI. and CLXXXVII.

waſted

wasted with a long course both of that and repeated pregnancies.

DLVII. There are two causes of as many affections which have got only one name between them, that of thirst: The one is sthenic, the other asthenic (*a*). The former arises from the stimulus of salt, of rich and plentiful meals, of heat and labour, and some others; never ending in vomiting till the sthenic state is over, which is seldom. Its cure, with which we have here no concern, is cold water and the several debilitating powers.

DLVIII. The asthenic thirst, which is our present subject, depends always on pure debility, sometimes indirect, sometimes direct (*b*). Its tendency is always to stomach sickness, and, as that encreases, to vomiting (*c*); and when the vomiting becomes any way considerable, the consequence is that most acute pain, which a cramp in the stomach produces (*d*), and the other affection formerly explained (*e*). This progress is spontaneous, direct, and for the most part rapid.

(*a*) Ibid.

(*b*) CLXXXV.

(*c*) See CLXXXVII. CLXXXVIII.

(*d*) See par. CLXXXIX.

(*e*) CXC. to CXCV. and from that to CXCVIII.

DLIX.

DLIX. The hurtful powers here are all debilitating. The indirectly debilitating hurtful powers are, debauch in eating and drinking *(f)*, drunkenneſs, extreme fatigue, ultimately exceſſive heat (*g*), violent paſſions (*h*), exceſſive exerciſe of the intellectual faculty (*i*), debilitating food (*k*), an over-proportion of blood now converted into an under-proportion, together with the converſion of the ſthenic diatheſis that attended the former, into the aſthenic, the inſeparable attendant on the latter. The following powers act by a directly debilitating operation; cold corrected by no ſtimulus (*l*), cold drink, vegetable food (*m*), penury of blood (*n*), of other fluids (*o*), want of pure air *(p)*, anxiety, grief, fear (*q*), and, in fine, that weakneſs of the ſyſtem, which

(*f*) CXXVIII. CXXX.
(*g*) CXV.
(*h*) CXLI.
(*i*) CXXXIX.
(*k*) CXXVIII.
(*l*) CXXII.
(*m*) CXXVIII.
(*n*) CXXXIV.
(*o*) CXXXVII.
(*p*) CXLVI.
(*q*) CXLII.

arises

arises from all those. The affection is often of a mixt origin, from a mixture of both these sorts of hurtful powers: For, as direct debility always increases the indirect, so does the latter the former, both in this and all cases (*r*)

DLX. A corruption of the common mass of fluids, whether it be called acrimony, or putrefaction, has no concern in the cause; because, while life remains, and the action of the vessels upon their respective fluids continues, such a faulty state of the fluids cannot make its havock over such an extent of the system, that being only the effect of a cessation of motion of the fluids under heat; nor can it happen, but in the extreme vessels and excretory ducts, which, by their atony, do occasion such a cessation of motion, and likewise in the alimentary canal.

DLXI. The cause of this thirst is the common one of every asthenia, but predominant in the throat and stomach, upon account of the atony of the salivary, and other excretory ducts (*s*).

(*r*) XLVII. LXXI.

(*s*) CLXXXVI. CLXXXVII.

DLXII. The remedies are alſo the common ones of every aſthenia, to be accommodated to the degree of debility in the cauſe. In a ſlighter degree of thirſt a glaſs or two of brandy, or of any ſimilar ſpirit, or, which is a better rule, given till the complaint is removed, is ſufficient. It ſhould be either pure, or diluted with a very little hot water (*t*). That ſhould be followed by eating ſome animal food (*u*); and it ſhould afterwards be ſupported by other ſtimulants taken moderately, and in the degree that ſuits good health. After which the proper practice is, to proceed to the uſe of the permanent ſtimuli.

DLXIII. When the thirſt, not quenched by theſe means, proceeds directly to vomiting, and when, by and by, an excruciating pain ſupervenes upon the vomiting; which, excepting the pain, is an affection, that, toge-

(*t*) The addition of cold water counteracts, that of hot co-operates with, the effect, which has been aſcertained in a thouſand trials.

(*u*) When the thirſt was but juſt coming on, and not yet eſtabliſhed, I have found a hearty breakfaſt carry it off. But when it is comes to a head, the mixture of ſtomach ſickneſs, that now begins to take place with it, renders eating impracticable.

ther with the ſymptoms that have been mentioned (*x*), ſhould receive the appellation

Of Dyſpepſanodyne, or Indigeſtion without Pain:

And when, beſides the pain of the ſtomach, now induced, the affection going downward to the inteſtines, ſometimes produces a looſe, ſometimes a bound, belly; at other times only a looſe belly, and at others only a bound one; which is an affection, when unaccompanied by coſtiveneſs that is diſtinguiſhed by the title

Of Diarrhæa:

DLXIV. And, when accompanied with coſtiveneſs, is entitled to the denomination

Of Colicanodyne, or Colic without Pain:

DLXV. In all thoſe caſes recourſe muſt be had to a larger doſe of the drink: And, when that does not ſucceed to our wiſh, we

(*x*) From DLVI. to DLXII.

muſt

muſt next fly to opium, and other more diffuſible ſtimuli, if they are to be found: When, by theſe, relief is procured, rich and pure ſoups, without greaſe, ſhould, from time to time, be poured in, and the canal carefully bathed all over with them. After which, the other ſtimulants ſhould be added; in the uſe of which, a ſtraight direction between direct and indirect debility ſhould be held, without the leaſt deviation towards either: And our efforts muſt always be continued till the diſeaſe is radically removed.

DLXVI. The neceſſity for this direction in the cure is ſo much the greater; that, by neglecting it, or depending upon the common purgative debilitating plan, the conſequence is, that often a proper general diſeaſe degenerates into a local affection. To proceed to the conſideration

Of the Kindred Diſeaſes of the Alimentary Canal.

DLXVII. Among them, beſides thoſe that have been mentioned above *(y)*, there are not

(y) From DLVI. to DLXVI.

wanting,

wanting others, which, when compared with them in the ſimilitude and nature of the cure, abſolutely claim this place in the ſcale.

Of the Diſeaſes of Children.

DLXVIII. The diſeaſes of children are, dryneſs of the ſkin, ſudden ſlaver, or ſalivation of ſhort continuance; a ſimilar rejection of milk, without effort (*z*); green ſcouring; at other times coſtiveneſs; both commonly with gripes; the uſual mark of which is, a pulling up of their knees towards their ſtomach, with very ſevere crying; unequal heat; a little more ſevere than thoſe are the two following caſes, the one of which has the name

Of Worms.

DLXIX. Which are diſtinguiſhed by a thickening of the columna naſi; by a cuſtom of picking the noſtrils; by loſs of complexion; by paleneſs of the face and of the reſt of the ſkin; by a ſwelling of the belly; and, laſtly, by the diſcharge of worms by ſtool.

(*z*) See CCCCIII.

 The

The moſt diſtinct ſymptoms of the other affection, or

Of Tabes, or the general Waſting of the Body,

DLXX. Are meagerneſs all over the body, n unuſual bulk of the abdomen, almoſt conſtant watching, ſuch a weak, diſtreſſed, aſſiduous, and hoarſe manner of crying, as excites tenderneſs and compaſſion.

DLXXI. The hurtful powers, producing all thoſe affections, are in common to them with every aſthenia; that is, they are every thing that has an effect of debilitating the whole ſyſtem, and eſpecially the alimentary canal: Such as, at this age, are, milk not nouriſhing enough, and at the ſame time aceſcent and flatulent; want of food, or made of watery matter and bread; cold, and moiſture, the latter encreaſing the effect of the former; habitual vomiting and purging; too little dandling; miſtiming ſleep, and meals, and every part of management; naſtineſs; impure air; a neglect of natural likings and diſlikings.

(*a*) It is that longitudinal depreſſion which runs down from the partition of the noſtrils perpendicular to the upper-lip.

DLXXII.

DLXXII. The remedies are the converſe of all thoſe, nouriſhing exciting milk; three or four meals a day, conſiſting chiefly of warm milk, pure animal ſoups, not weak, with a mixture of flower or bread of the ſame kind; heat without being carried ſo far as to produce ſweat, or too much redneſs, and free from moiſture; laying aſide every ſort of evacuation; a great deal of dandling and geſtation; a proper timing of ſleep, of food, and of every part of management of theſe delicate ſyſtems; cleanlineſs; tepid bathing in cold weather, and cold bathing in warm; and pure air, being out in the fields as often as poſſible in all but moiſt weather; ſuch a judicious attention to deſires and propenſities as not to neglect ſcratching any part that itches (*b*).

DLXXIII. Theſe directions ſuit the gentler caſes *under conſideration*. To remove the more violent, while thoſe alſo are not by any means to be neglected; at the ſame time others are to be ſubjoined. When the green ſcourings, great looſeneſs, and boundneſs of belly, are vexations; recourſe muſt be had to pure wine, ſpirits, more or leſs diluted as the occaſion

(*b*) See above DXVIII.

may require, or if their ſhould be need, not diluted at all: More of the ſoup that has been mentioned, and alſo of a richer kind.

DLXXIV. If thoſe ſhould not ſucceed to the *phyſicians* mind, which will ſeldom be the caſe; in the ſame affections, and more certainly in worms, and ſtill more certainly in the tabes, or general conſumption, with the remedies that have been ſpoken of the more diffuſible ſtimuli of opium and muſk ſhould be alternated. Both ſorts of remedies (*c*), ſhould be ſo accommodated to the violence of the ſymptoms, as not to be dropped till the whole morbid tumult is allayed, and the healthy ſtate replaced; which will, upon trial, be found more practicable, than has yet been imagined from the employment hitherto of the contrary plan of cûre, to the great comfort of mankind in their ſufferings.

DLXXV. From what has been ſaid it will appear, that theſe affections of children, *all* flow from the ſame cauſe, are removed *all* upon the ſame indication of cure, as any other aſthenia, or diſeaſe of debility, that has either yet been, or is to be, mentioned in this work.

(*c*) The durable and diffuſible.

The

The unhappy termination of them hitherto, is to be imputed not to their cauſe, but to the depravity of the common method employed for their cure (*d*): Nay, though they do degenerate into local affections, as in the inſtance of the tabes, or general conſumption, ending in an obſtruction of the miſentery; in that of cholic at every age, terminating in an inflammation, tumour, or complication of the inteſtines; and in thoſe of both cholic and long-neglected diarrhœa, running into a gangrene in the ſame part; that is a misfortune that never happens, when a proper method of cure is early enough uſed to remove the primary diſeaſe: And, on the contrary, it moſt commonly ariſes from the perverſity of of that plan of cure, or the neglect of this, which is the proper one. To the ſame kindred

(*d*) I cannot help repeating again, becauſe the importance of the ſubject calls upon me to do ſo; that the practice of the new plan of cure, in all the diſeaſes of children, as well as in the others lately ſpoken of, has ever ſucceeded in my hands, as well as in thoſe of my pupils, to a miracle. I cannot ſay that ever I met with an inſtance where it could be ſaid to have failed. Let then who will compare that account with the known mortality that is every day the reſult of any other practice yet thought of in the profeſſion.

diſeaſes of the alimentary canal (*e*), further belong *the two following ones*, under the title

Of the gentle Dyſentery and Cholera.

DLXXVI. To which, every thing that has been ſaid of thoſe kindred ones, will apply: Or, if there be occaſion for any particular obſervation upon them, it will be taken up, after we come to treat of them in their more *ſevere and* violent ſtate: Of a ſimilar nature to all theſe, but of a degree ſo much higher, as to merit the next place in rank below them, and, *at the ſame time*, not unconnected with them, as having the ſeat of its predominant ſymptom in the ſame canal, is the diſeaſe to which I have given the name

Of Angina.

For the ſymptoms and method of cure of which turn back to number CCXXII. where it is introduced, in the explanation of aſthenic ſymptoms.

(*e*) From DLXVI. to the preſent paragraph.

Of

Of Scurvy.

DLXXVII. Scurvy is an evident aſthenia: The principal ſymptoms of which are, want of appetite, loathing of food, laxity of the living ſolids conſidered as ſimple ſolids; an oozing of blood, both from other parts, and particularly from the gums; averſion to labour; low ſpirits, and a languor in all the functions.

DLXXVIII. The hurtful powers producing this diſeaſe, are the common aſthenic ones, appearing in the following form; It is cold in this caſe, but conjoined with moiſture in the northern ſeas, and, as *we may well ſuppoſe*, in the parts of the ſouthern ocean of the ſame temperature, that generally produces the peculiar form of the diſeaſe. But with it all the other debilitating powers contribute their ſhare: Such are, grief for the loſs of liberty, relations, kindred, and friends; a horrid diſlike to their preſent ſtate of life; a longing deſire for that which they have parted with; the awe which the ſeverity of diſcipline keeps them in; *the effect of* a calm, where there is nothing to do, producing direct debility on

 them;

them; a ſtorm, where they have to labour above their powers, *as certain a cauſe of* indirect debility; their not having been allowed, till of late, freſh meat, which is the only nouriſhing and envigorating (*f*) *form of it*; their being kept upon ſalted and ſpoiled meat, and not even corrected by recent vegetable aliment, ſuch as that is (*g*); watery or ſmall drink; the terror which the expectation of a battle at ſea inſpires.

DLXXIX. All thoſe particulars prove, that ſcurvy is ſo far from being the effect of one or two hurtful powers, and from reſting upon ſo narrow *a baſis of* the cauſe *producing it*, as has hitherto been imagined; that it is rooted in a multiplicity of debilitating powers, and is a real aſthenia, *or univerſal diſeaſe of debility*,

DLXXX. And this fact is confirmed by both the true and falſe method *employed* for its cure: For, though nearly all the common powers concur in the production of ſcurvy; if, however, it be conſidered, how eaſily, upon the removal of the hurtful powers, and the patient getting a ſhore, the diſeaſe is got

(*f*) See CXXIV.
(*g*) See CXXVIII.

under, by fresh meat, either with or without greens, by wine, gestation, and exercise, in fine, by the recovery of his usual manner of living; it will be impossible to entertain a doubt of its being both an asthenia, and by no means a violent one. The pretence of its cure being effected by greens, roots, sour crout, and similar things, so much boasted of lately, which, without the remedies just now enumerated, could not fail, by their debilitating operation, to aggravate the disease, is derived from a noted blunder among physicians, by which they are led to overlook the most certain, simple, and evident facts, and take up, in place of them, the greatest falsehoods, or such facts as have a very narrow foundation in truth.

Of the gentle Hysteria.

DLXXXI. The gentle hysteria is a form of asthenia, of frequent occurrence among women, but very rarely happening to men; in which a noise is heard in the belly, and the patient has a sensation of a ball rolling within *the bowels*, rising up to the throat, and there threatening the patient with suffocation.

DLXXXII. The ſtriking ſymptom in this diſeaſe is a ſpaſm, not fixed in a part, but running the courſe *juſt now* deſcribed. The diſeaſe attacks in fits, for the moſt part leaving long intervals betwixt them, and often never recurring more than once or twice.

DLXXXIII. The fits are ſoon removed by ſmall doſes of opium, repeated at ſhort intervals: The intervals ſhould be ſecured from danger by full diet, and a moderate and naturally ſtimulant management.

Of Rheumatalgia, or the Chronic Rheumatiſm.

DLXXXIV. Rheumatalgia is an aſthenia, not ſo much a ſequel of rheumatiſm when left to proceed in its own ſpontaneous courſe, as of the profuſion of blood and of other fluids employed for the cure of it, and of too debilitating a cure; with a change of the ſthenic diatheſis and the inflammation, which is a part of that, into the aſthenic diatheſis and inflammation. Paleneſs of the ſkin takes the place of complexion: The appetite is diminiſhed, the involuntary motions are impaired, debility and torpor prevail over all. So far the diſeaſe is underſtood to be chronic.

As

As in rheumatiſm, the joints are pained and inflamed: As that, which has been aſſigned, is the moſt frequent cauſe of rheumatiſm, ſo it ſometimes ariſes not from a ſthenic origin, and an exceſs in the means of reducing that.

CLXXXV. The cauſe of the diſeaſe is the uſual one of any aſthenia, predominant in the moving fibres of the muſcles, ſituated below the ſkin over the whole ſurface of the body.

DLXXXVI. Its worſt morbific powers are, penury of blood, cold, eſpecially with the addition of moiſture, impure air, and beſides theſe, as many of the other powers that act by a debilitating operation as happen to be applied, contribute, in proportion to the degree in which they are applied to the morbid effect. Of theſe exceſſive indolence and the reverſe are particularly hurtful.

DLXXXVII. As all ſtimulants contribute to the reſtoration of the healthy ſtate; ſo the moſt powerful of them in this caſe is nouriſhing food, friction, geſtation, wine, taken in moderation, exerciſe, rather frequent than violent, and being as much as poſſible in the open air. If it is an acknowledged fact, that rheumatalgia is one of the reproaches of phy-
ſicians,

ficians, it is more ſo than has been hitherto interſtood; it being an aſthenic diſeaſe, while they at all times made uſe of the ſame kind of cure, as if it had been the moſt ſthenic, or even upon the whole more debilitating (*b*).

Of the Aſthenic Cough.

DLXXXVIII. The aſthenic cough is an aſthenia, which with the conſtant ſymptoms of the latter, depends upon a frequent expectoration, that the cough excites; affecting every age, which has been under the influence of either direct, or indirect debility, and therefore old age, which is unavoidably the prey of indirect debility.

DLXXXIX. As conſiſting in indirect debility, it is the effect of an exceſſive violence of all ſtimuli that have been applied either for a ſhort time, or for a great part

(*b*) If they ſhould pretend to ſay that their bleeding and other evacuations were more moderate than in rheumatiſm; the anſwer is, that they were not ſo profuſe at any given time: But, conſidering the length of time, that rheumatalgy draws out into, the frequent, and almoſt conſtant evacuations, conjoined with every ſpecies of inanition, made the debilitating practice upon the whole far exceed that uſed in the ſthenic caſe. No wonder, then, that much miſchief was done.

of

of life, their operation coming to the ſame amount, that of the former from its degree, and that of the latter from its long continuance (*i*). In ſo far as its cauſe is direct debility, a deficiency of all the ſtimuli, leaving the excitability to be accumulated, allows this form of aſthenia to happen from the ſpontaneous tendency of nature, of which life is only a forced ſtate (*k*).

DXC. The cough, which depends upon indirect debility, is cured by reducing, the ſtimulus which occaſioned it, gradually and cautiouſly to the proper and natural degree. And when it originates from indirect debility, the encreaſe of the ſtimulus, *the want of which occaſioned the diſeaſe*, till the degree of excitement, which conſtitutes health is replaced, effects the cure.

DXCI. Such is the nature of direct and indirect debility; that if the remedies of the former be puſhed beyond the boundary, the

(*i*) See above XXIX. XXX. and CCCCI.

(*k*) So great is nature's tendency to that particular encreaſe of excretion, which forms the matter of expectoration in this diſeaſe, that every caſe of death from diſeaſe is an inſtance of it. Hence the dead rattle in the throat is univerſally the expiring ſymptom. See LXXII. and CCCXXVI.

cough appears again; and the ſame is the event of the ſame exceſs in the uſe of the remedies of the latter (*l*).

DXCII. Frequent and violent cough with copious expectoration has been always held for a ſure mark of a vitiation or faulty ſtate in the lungs. That faulty ſtate was eſteemed to be of a ſthenic nature, and to give aſſurance of the preſence ſometimes of phthiſipneumony, or conſumption from an ulcer in the lungs, ſometimes baſtard peripneumony, ſometimes of a burning inflammation in the alimentary canal. In the former caſe an ulcer, or, in their way of ſpeaking, and what amounts to the ſame thing, tubercles were believed the cauſe of the diſeaſe; in the ſecond caſe inflammation either in the intercoſtal muſcles, or a different one from that, which in true peripneumony was, in their opinion, its primary cauſe, was conſidered as the cauſe; and in the laſt caſe, no one of them would have heſitated a moment to have aſcribed the ſtate of the bowels to the only inflammation they were acquainted with, that which re-

(*l*) See par. XXXIII. XXXIV. and XLIII. XXX. CXXXIV. with the addition, and eſpecially CCXXXIII. to CCXXXVI.

quires

quires bleeding and evacuation for its cure. And no other enquiry was made, but whether the matter that was ſpit up, was mucus or pus. To aſcertain that premiums were propoſed.

DXCIII. But, in fact, beſides that no phthiſipneumony, no baſtard peripneumony, as they call it, no inflammation in the alimentary canal, was ever cured by antiſthenic or debilitating remedies; and that, in the ſeveral trials that have yet been made, the firſt of theſe caſes has been evidently aſſiſted, nay frequently completely removed, and the two latter thoroughly cured in numberleſs inſtances, and in all in which it has been uſed by the ſthenic, or ſtimulant plan of cure; I ſay, beſides theſe large and comprehenſive facts, ſo little ſignification is there, either in the quantity or appearance of the expectoration, that in certain fevers, in other diſeaſes of debility, quite free of all local affection, and finally in this very cough of which we are ſpeaking, there is often a more violent cough, and a greater expectoration of matter putting on every form and every appearance, than uſually happens in a confirmed conſumption, and where every hour is expected to be the

the laſt. And yet the whole tumult, hitherto ſo alarming, could be ſtopt in a few hours, and quite cured in as many days.

DXCIV. And, who does not know, that there are many perſons, who have an immoderate cough, and proportional expectoration for a whole and long life-time, whoſe lungs, however, are ſound, and free from any organic taint? How often in phthiſipneumony itſelf after finiſhing its courſe, and at laſt terminating in death, has the whole fabric of the lungs been found upon diſſection as ſound as ever happens in death from any cauſe(*m*)?

DXCV. The

(*m*) There are ſeveral caſes upon record, of the lungs after death from a confirmed conſumption, having been found perfectly ſound. A moſt reſpectable pupil of mine went to Liſbon with a young gentleman of conſiderable rank in Scotland, under a confirmed conſumption, whom he brought back perfectly freed from his diſeaſe. He alſo ſaved either two or three ladies, I am not juſt now ſure which; equally given up upon the common practice. He happened to aſſert before the phyſician of the factory, that a perſon juſt dead of the ſame diſeaſe had no local affection in the lungs, and upon diſſection it was found to be as he had ſaid. I have reſtored many phthiſipneumoniacs, but am obliged to own, that I have loſt three, to whom I was called too late. Their loſs, however, mortified

DXCV. The cauſe of cough has hitherto been unknown. To paſs over the ſthenic cough, with which we have nothing to do in this part of our ſubject (*n*); the cauſe of the aſthenic is the ſame as that of any aſthenia, but more vehement in the fountain of expectoration, to wit, the exhalant and mucus arteries, the ſecreted fluids of which, inſpiſſated by ſtagnation *in the bronchia*, compoſe the matter to be expectorated.

α. α. The moſt powerful of the aſthenic hurtful agents in exciting aſthenic cough, is cold, juſt as heat has been demonſtrated the moſt hurtful agent in catarrh (*o*). Nay, in the aſthenic cough, ſuch is the rage of cold, that the ſlighteſt breath of air reaching the body, excites a moſt prodigious tumult of coughing, and brings out the whole ſeries of

mortified me, becauſe there were many reaſons for my ſetting my heart upon their cure. I alſo loſt in Edinburgh the moſt amiable young man of that kingdom, after curing a prodigious hemorrhagy from his lungs. This was he whom my pupil two years before brought home ſafe from Liſbon. But I was prematurely diſmiſſed in this, and counteracted, in the other caſes.

(*n*) See CLX. CCXXXIII.

(*o*) See par. CCCCVII. to CCCCXII.

ſubſequent ſymptoms; and heating the body in the bed as ſoon allays the cough, prevents the threatening, and cures the urgent diſturbances (*p*).

DXCVI. In this as well as the ſthenic cough, it is the ſerous and mucus fluids that chiefly flow to the bronchia. Which bear their preſſure for a little, till, diſtended by the load, they can bear it no longer. The diſagreeableneſs of the ſtimulus excites a commotion in the excitability of the labouring part, and, therefore, over its whole ſeat, and rouſes the excitement. A cough ariſes, and throws off its cauſe, the collected humours.

DXCVII. This diſeaſe is always to be treated for its cure, firſt with ſtimulant remedies, and then with ſuch as alſo fill the veſſels. If indirect debility has been the morbific power, ſtill we muſt ſtimulate, but at firſt with a force of ſtimulus little leſs than that, which occaſioned the diſeaſe, and then with ſtill leſs; and, after changing, from time to time, the form of the ſtimulus, with leſs ſtill; till we we come down to the ſtimuli that are agreeable to nature, thoſe that ſuit the moſt

(*p*) All from *α*. *α*. is an addition to the original.

perfect

perfect health (*q*). In that way is ebriety, in that way is every form of intemperance, to be treated. If direct debility has been the cause, the cure will be a good deal more easy: That is we must go on to stimulate more and more, till we get up to that point of excitement, to which we came down in *the case of* indirect debility. In this way is the first stage of phthisipneumony, as well as its middle course, and also bastard peripneumony, nay, most cases of the debility affecting young people, and the disease to which the name

Of Chincough

DXCVIII. Is given, to be encountered in practice. Chincough is attended by a contagious matter; which varies in its degree, but in such sort, however, that a sthenic plan of cure, adapted to the degree of the disease, for certain cures it. The change of climate or place is a tale, the practice of vomiting is death (*r*). And, since the disease is an

(*q*) See par. CIII.

(*r*) Still to the old tune "cantilenam eandem canunt." They confessed they knew nothing about this disease, yet they

an aſthenia, vomiting, which is ſo very debilitating an agent, cannot fail to be of the higheſt detriment (*s*).

Of Cyſterrhæa, or the Mucous Diſcharge from the Bladder of Urine.

DXCIX. Cyſterrhæa is that mode of aſthenia; in which, to the general ſymptoms

they preſcribe change of air and place: If they knew nothing about the diſeaſe, how could they know what would be of ſervice?—Others told them ſo. But why do they preſcribe vomiting?—They heard that from their maſter's deſk at ſchool, and found, that the ſame authority, was the reaſon of others for doing the ſame thing. Why vomiting? For the ſame reaſon, and becauſe a relique of the doctrine of morbific matter has run through all their ſyſtems. Hence in bleeding diſeaſes, the univerſal rule has been to bleed; in vomiting to give emetics, in diarrhæa to give cathartics, in imitation, forſooth, of nature. The ſymptoms of diſeaſe have been miſtaken for efforts of the conſtitution to remove the diſeaſe. It is now, however, proved, that there are no ſuch efforts. Every ſymptom, and particularly every morbid evacuation, is to be ſtopt. The contrary practice is as good ſenſe, as it would be to propoſe bringing on a dead rattle to cure the morbid one.

(*s*) See par. CXXXVII. and the addition in MS and CCXCIV.

of

of aſthenia, and the particular ones of aſthenic cough, there is an addition of mucus, rendering the urine turbid, without any previous pain or ſymptom of internal local affection.

DC. In ſo far as this is a general affection, the laxity proportioned to the atony muſt be removed equally in it, as in other caſes of encreaſed excretion; and particularly the ſtimuli of health muſt be accurately adminiſtered.

Of the Gout of ſtronger Perſons.

DCI. The gout of ſtronger perſons is a form of aſthenia; in which, after a long habit of luxury and indolence, and eſpecially, when to thoſe hurtful powers directly debilitatings ones have been recently ſuperadded, indigeſtion, or diarrhæa, or rather both conjoined, with manifeſt ſigns of a diminiſhed perſpiration, precede; then the lower extremities are affected with languor. Of the leſſer joints, almoſt always the one or other foot is ſeized with an inflammation, which, if not reſiſted by a piece of art quite new, will prove moſt ſevere, moſt painful, and of ſhort

 duration,

duration, comparatively to its ſtate in that reſpect in the after part of the diſeaſe.

DCII. This diſeaſe may be called the indigeſtion or dyſpepſia of the luxurious, that is, depending upon indirect debility; while dyſpepſia may be denominated the ſame diſeaſe, that is, the gout of perſons under direct debility, as having every ſymptom of the gout, except the inflammation (*t*). For, in diſeaſes, ſo little is there in names, that not only thoſe diſeaſes, of which we have been juſt now treating, but likewiſe aſthma, hyſteria, the cholic, and moſt of the diſeaſes, which

(*t*) There are very few perſons, who at one time or another in their life have not experienced painful twiches in ſome part or other of one of their feet, eſpecially when they happened to be in a ſtate more languid and ſluggiſh than ordinary. Every which caſe may be conſidered as a gout in miniature. But when the whole phenomena, except the inflammation, happen to any perſon, call it dyſpepſia, or what you will; it is to all intents and purpoſes a gout. Indeed, from all that has been ſaid through this work, general morbid ſtate appears to be a very ſimple affair, being nothing but an encreaſe or diminution of the cauſe of the functions or powers of life, without any other difference, but that of the mere appearance of the ſymptoms to our ſenſes, an appearance by which, when we look no further for information, we are alſo conſtantly deceived.

have

have taken their appellations from any remarkable disturbance of the alimentary canal, are equally prevented and cured by the same method of cure precisely. Which is indeed the reason why the gout has been ranked in the number of the diseases of the same canal.

DCIII. A taint transmitted from parents to their offspring, and celebrated under the appellation of hereditary, is a tale, or there is nothing in the fundamental part of this doctrine. The sons of the rich, who succeed to their fathers estate, succeed also to his gout: Those who are excluded from the former, are also from the latter, unless they bring it on by their own merit. Nay, if there be but only two diseases in the strict sense *of the word*, they must be either all, or none of them, hereditary. The former supposition makes the hurtful powers superfluous, which have been proved to be every thing *respecting disease*; and, as it is, therefore absurd, so the truth of the latter must be admitted. The stamina, or bulk of our simple solids, are so given in our first confirmation, that some persons are distinguished by a gross, others by a slender state *of the whole mass*. That variety of the stamina, if the exciting powers, upon

which the whole phœnomena of the life depend, be properly directed, admits each its respective ſtate of health, ſuited to its respective nature, and ſufficiently commodious, if the excitement ſuited to each, from a proper direction of the ſtimuli *producing it*, be properly applied. Though Peter's father may have been affected with the gout, it does not follow that Peter muſt be affected; becauſe, by a proper way of life, that is, by adapting his excitement to his ſtamina, he may have learned to evade his father's diſeaſe.

β. β. If the ſame perſon, who from his own fault and improper management, has fallen into the diſeaſe; afterwards, by a contrary management, and taking good care of himſelf, both prevents and removes the diſeaſe, as it has been lately diſcovered: What then is become of hereditary taint (*u*)?

Laſtly, if the gout is the ſame diſeaſe as dyſpepſy, ariſes from the ſame hurtful powers, is removed by the ſame remedies; and the only ſymptom, in which it can poſſibly be thought to differ, the inflammation, is only a ſlight part of the diſeaſe, depending upon the ſame

(*u*) All this, from β. β. is an addition to the Latin text in MS.

original

original cauſe, and ready to yield to the ſame remedies; what ſignify diſtinctions about either, that do not apply to both (*x*)? Nothing by them further is ſet forth, than, that a certain texture of ſtamina is favourable to certain forms of diſeaſes, which (forms) are of no conſequence, in ſuch ſort, that, when the excitement is adapted to the ſtamina, even thoſe forms can be prevented or cured.

DCIV. The hurtful powers producing the gout are, firſt, indirectly debilitating, not effectual all of a ſudden, nor commonly before the meridian of life, that is, before the thirty-fifth year of one's age. Rich food, too much eaſe, have a very great effect, drink has leſs. To that all that have a tendency, to wear out life, to conſume the excitability, contribute. But the firſt fit ſcarce comes on till directly debilitating hurtful powers have

(*x*) If I have kept off my gout for ſeven years paſt, after having been ſubjected to the moſt ſevere rage of the diſeaſe, might not I, much more eaſily, have prevented it before? But, it may be ſaid perhaps, that excruciating pain makes a great difference in the ſcale of compariſon of any two diſeaſes: The anſwer to that is, that ſince the pain is as eaſily removed as the other ſymptoms, the difference is removed, and the weights in the ſcale equalized.

been

been ſuperadded to the indirect (*y*). The following are particularly hurtful, abſtinence, vegetable food, the hurtful effect of which is in proportion to the embecility of the matter that compoſes it. The farinaceous ſubſtances, which are by no means ſafe (*z*), and leſs hurtful than roots, and theſe leſs ſo than greens (*a*); but fruits are the moſt hurtful of all (*b*).

(*y*) My gout came on at the thirty-ſixth year, after five or ſix month's low living: It returned not again till betwixt five or ſix years after, becauſe all the intermediate time I had been well ſupported: And this ſecond fit was uſhered in with low living, immediately previous to it, for near the ſame length of time, as before the coming on of the firſt fit. Nay, no gout ever came on but in conſequence of direct debility; the indirect has not ſo quick an effect in that reſpect; at the ſame time it has a tendency to be hurtful, and therefore ſhould be avoided.

(*z*) A meſs of porridge, a diſh uſed in Scotland, with ſmall beer poured upon it, and taken over-night, would bring on a fit of the gout next day.

(*a*) The juice of turnips, of cabbage, and even peaſe-pudding and peaſe-ſoup, which are commonly reckoned ſubſtantial diſhes, have the ſame effect: When thoſe ſubſtances, after being boiled, are uſed with a good ſolid meal of meat, I have always found them innocent. Green peaſe ate, with lamb or fowl, is both harmleſs and grateful.

(*b*) Apples and pears are ſuch: But the cold fruits, as melons, cucumbers, are almoſt inſtantaneous in their hurtful effect.

Cold

Cold water, in the height of the diathesis, given to quench thirst, immediately produces nausea, vomiting, and other distressing symptoms of the stomach and of the rest of that canal, and hurries on a formal fit (*c*). The mixture of an acid with pure cold water encreases the hurtful effect. Of the strong drinks; those prepared from barley by fermentation, that is, the different ales and beers, all the white wines *in common use*, except Madeira and Canary; and among the red wines claret, indeed all the French wines, and punch with acid, all these are remarkably hurtful. And as indolence helps on with the first fit, so fatigue, especially that of walking, hurry on all future ones. Want of a sufficient quantity of blood is so hurtful at all times, that, though the theory of physicians led them to the notion that the disease depended on plethora and vigour, yet no body ever thought of taking blood (*d*). Vomitting is bad, and indeed one of the natural symptoms of a very bad state of the disease; but purging the belly

(*c*) See CLXXXIV. to CXC. to CCXXXVII.

(*d*) This is one of their many contradictions between theory and theory, and theory and practice.

is worſe (*e*). Every evacuation has a ſimilar bad effect, with this diſtinction, that the artificial are much more hurtful than the ſpontaneous.

DCV. One is to be excepted, that is, exceſs in venery, to which, though it be a ſpontaneous and natural, not an artificial, evacuation, gouty perſons are ſo addicted, and ſo exceed others in power, that in the very middle of a very bad fit, they are not ſparing of it. That effort at firſt is not perceived; but in the advance of age, and after many returns of the diſeaſe, it is felt at laſt with a vengeance (*f*). Great heat, by its indirectly debilitating operation, does ſome hurt (*g*), but great cold, by its direct debility, much more (*h*). Impurity of air

(*e*) At any time I can bring on a fit by a ſingle doſe of Glauber's ſalt, unleſs I happen to be very ſtrong, and quite free of all diatheſis.

(*f*) At an advanced period of age, in perſons who had been vigorous, an unnatural power of execution ſometimes, even in actual morbid ſtate, will take place, ſo as that the perſon will be able to outdo all his former doings in that way. But it is a falſe power, it is a ſymptom of diſeaſe: It is like unnatural appetite for food amidſt a weakneſs of the powers of digeſtion.

(*g*) CXV.

(*h*) CXVII.

is

is inimical (*i*), as well as an interruption in the train of thinking (*k*); but hard thinking is more hurtful. A deficiency in the ſtimulus of paſſion is a pretty conſiderable hurtful power (*l*): But a high intenſity of it will convert this moderate degree of the gout into that higheſt degree of it, that attacks the head; lays a ſnare to life, and brings on certain death (*m*).

DCVI. Long ſleep is bad (*n*), as producing direct debility, by deferring the re-application of the ſtimuli, which the watching ſtate afford; but ſhort ſleep is much more hurtful, leaving behind it a degree of fatigue ſtill remaining from *the effect of* the ſtimuli of the former day (*o*). Often, after the upper parts of the body have been recruited with enough of ſleep, after getting up, the *podagric* feeling a ſtate of languor in his lower extremities, and a demand for more ſleep to them, is obliged to go to bed again, and give the

(*i*) CXLVI.
(*k*) CXXXIX.
(*l*) CXLI.
(*m*(Ibid.
(*n*) CCXLV.
(*o*) See Part II, Chap. VII. CCXXXVII.

unre-

unrecruited limbs their reſpective ſhare of ſleep When a perſon is torpid from ſhort ſleep, how great is the luxury to cheriſh again by the heat of the bed-clothes all the parts that have been expoſed to cold, that is, the whole ſurface of the body and thighs, but eſpecially the legs and feet, which laſt, during the preſence of the fit, is the ſeat of the inflammation; and, how delightful *in that way*, to make up the neceſſary compliment of the ſleep that is wanted.

DCVII. To prolong the intervals *of health*, and prevent a fit, the remedies are all the reverſe of the hurtful powers: They are, rich food taken in plenty (*p*), but remaining within its ſtimulant range, conſequently of the animal kind, with a rejection of all ſorts of vegetable matter, or a very ſparing uſe of it; ſtrong drink, not taken cold, unleſs when there is no danger of the diſeaſe (*q*) (at which time tion,

(*p*) See par. CCLXVI.

(*q*) I know well when I may take cold drink and uſe ſome vegetable matter; it is when, for ſome time paſt, I have been well ſupported, and feel ſtrong and vigorous. I alſo know, if I have, either in food or drink, taken any thing improper in kind, how to correct it; which is, by having recourſe to a proper ſtimulus. By eating an exotic fruit, which had a mixture of the qualities of the water

cold water is ſafe after a good meal), not mixed with acid, not aceſcent, not under a turbid fermentation while it is taken (*r*); geſtation (*s*), exerciſe ſhort of bringing out ſweat, or giving fatigue (*t*), a full quantity of blood, which is procured by food and the motion juſt now mentioned (*u*), no evacuation (*x*), ſparing venery, if that could be made good in ſuch perſons (*y*), a moderate temperature (*z*), kept equally between *the extremes* of direct

ter melon the orange and lime, in a quarter of an hour I had an attack in my ſtomach, in the middle of my lecture laſt ſummer, at the Devil Tavern. By ſome of the diffuſible ſtimulus I repelled it, and went well on with my lecture. At other times I have prevented ſuch an effect, by anticipating the remedy. This doctrine puts much more in our power: But we ſhould not, therefore, play tricks with it. On the contrary, we have great reaſon to be thankful for the command it gives us over our health, and that alſo, by the uſe of means not inelegant, nauſeous, and clumſy, but quite the contrary. The old motto of Aſcleiades, *tuto*, *celeriter*, *et jucunde*, is verified and improved by the important addition of *ſalubriter*.

(*r*) CCLXVIII.
(*s*) CCLXIX.
(*t*) Ibid.
(*u*) CCXC. CCXCV.
(*x*) CCXC.
(*y*) DCXIX.
(*z*) CXII.

and indirect debility, and inclining to neither; pure air (*a*), consequently cleanlineſs, and being much in the open fields, a happy train of thinking (*b*); ſuch a ſtate of excitement as to paſſion, as keeps between fiery exceſs and ſtupid apathy, with as great tranquillity of mind as poſſible (*c*); moderate ſleep, rather inclining to be long *than ſhort, a rule which ſhould* be ſo much the more *obſerved*, as the diſeaſe is of longer ſtanding and greater ſeverity: In fine, ſleep ſhould be allowed to continue till the moſt vigorous watching ſtate is procured (*d*).

DCVIII. From what has been ſaid *it muſt appear* certain, that the gout of ſtronger perſons is not alſo itſelf a diſeaſe of ſtrength, or a ſthenic one; and that it does not depend upon vigour of the conſtitution and plethora, as it has been commonly hitherto imagined; but that it is manifeſtly aſthenic, like all the reſt of the caſes belonging to aſthenia, and proved to be ſo by the ſtrongeſt evidence; and that it is not to be treated by an antiſthenic, as it has

(*a*) CCCIII.
(*b*) DXIII. DXVIII.
(*c*) CXL. CCCIII.
(*d*) DC.

hitherto

hitherto been the notion, but by a ſthenic plan of cure; and that there is every encouragement *for treating it in that point of view.*

DCIII. What had hitherto deceived phyſicians, *and paſſed* for a cauſe of the gout, was the appearance of vigour and an over-proportion of blood, in moſt podagrics, from the bulk of ſimple ſolids in conſequence of their way of life, and often from *great* ſtrength. But, good men! they never recollected, that vigour and a great quantity of blood was not a property inherent in animals, but that it depended upon foreign circumſtances every day and every hour (*e*). If any one, *according to that idea,* who has happened to get a great bulk of ſimple ſolids, and who has had abundance of proper diet, and lived in that way to the thirty-fifth or fortieth year of his age, ſhould all at once be deprived of all the articles of diet; and if a dwarf two foot high, who has lived poorly, and is, therefore, meager, and ſlender, ſhould equally ſuddenly be put upon rich living; will there be the leaſt probability, that the former will, notwithſtanding *his preſent* abſolute want, continue plethoric

(*e*) X. XI. XII. XIII.

and vigorous; and that the latter, from being now crammed with unuſual plenty, will continue empty, as he had been before? Is the fundamental propoſition of this doctrine, in which it has been demonſtrated, that we are nothing of ourſelves, and that we are altogether governed by foreign powers, to be forgot? Is a perſon liable to the gout, who has for twenty years undergone an exceſs of ſtimulant operation, about the fortieth year of his age, or even afterwards, to be reckoned fuller of blood and more vigorous, either than another perſon who has lived lower, or than himſelf twenty years before? Where, pray, was the neceſſity of comparing gouty perſons with others free from *all bias to* that diſeaſe, and not comparing them with themſelves *(f)*?

Of

(f) Such is the effect of the powers operating upon us, that a certain degree of that operation produces an effect that would not ariſe under another. If the accuſtomary operation has been moderate, habit will render the excitement ariſing from it, in ſome meaſure, ſufficient for the demands of the ſyſtem: Hence, day-labourers are ſupported upon leſs ſtimulus than gentlemen. Again, which is a circumſtance liable to happen to the latter, if the accuſomary operation has been exceſſive, there will be a neceſſity for a continuation of ſome degree of the exceſs. A podagric

may

Of the gentle Aſthma.

DCIV. Aſthma is an aſthenia; in which, to the ſymptoms in common to all aſtheniæ, there is ſuperadded a difficult reſpiration, returning at uncertain ſpaces of time, often inequal, without any unuſual expectoration accompanying the fits.

DCXI.

may be ſtronger than a labourer, and yet, fall into the gout. For, though compared with the other perſon, he is ſtrong; compared with himſelf at another time, he is weak: And the reaſon is, that though he is ſtill better ſupported than the labourer, he is worſe ſupported, than the uſual ſtate of his ſyſtem requires. Further, the labourer, though he falls not into the gout, may, by carrying his moderation too far, fall into indigeſtion, or ſome other diſeaſe, in every eſſential reſpect the ſame as the gout. A double inference ariſes here: Which is, that, though both exceſs and deficiency can be borne to a certain degree, ſo as to require a continuance of them, or a gradual correction, yet they ſhould both be avoided as entailing that ſort of neceſſity for their continuance while their effect makes no ſort of compenſation, being, at beſt, not the beſt ſtate, that of perfect health, but a ſtate of prediſpoſition to diſeaſe; the one to ſthenic and at laſt indirect debility; the other to aſthenic, as depending on direct debility. The perfect rule for enſuring the healthy ſtate, is to keep within the extremes of exceſs and

defect,

DCXI. The ſame are the hurtful and curative powers here, as in the gout: In the ſame manner are the fits *both* prevented and removed (*g*).

Of Cramp.

DCV. Cramp is alſo one of the caſes of aſthenia; in which, often from pain, often from drunkenneſs, and not ſeldom from ſweat, and diſagreeable ſoaking heat, ſometimes the wriſts, ſometimes one of the calves of the

defect, and thereby produce the due degree of excitement; and to apply all the exciting powers equally, each in its due proportion. The due degree may be ſecured by one or a few, but the equality of it over the ſyſtem can only be ſecured by their equal application. This propoſition goes to the bottom of two extenſive doctrines, that of life, and that of morals; the laſt of which has as yet not attained to any thing like a fundamental principle. I intend to proſecute the idea upon ſome future occaſion. I know a book filled with valuable ethic facts, but have not yet had time to conſider, whether they all point to a general one, in which they all agree, and which reflects proof and confirmation upon them; without which it would fall ſhort of ſcientific exactneſs.

(*g*) This has been proved, both upon other occaſions, and particularly in the caſe of a young gentleman, who lived with me during my firſt management of my gout. See Preface to the Elementa.

leg,

leg, in fine, any external part, are affected: Of the internal parts, *it is* sometimes the stomach, sometimes some part in the intestinal canal, sometimes the bladder of urine, *that* suffers: The disease is not confined to indirectly debilitating powers, as producing it; it also arises from directly debilitating ones, *such as* abstinence, vomiting, loose belly, and drinking water contrary to custom.

DCXIII. To remove this disease; when it does not exceed the gentleness that is here understood, the whole body must be invigorated by moderate stimuli, every most urgent exciting power should be taken out of the way; gestation, and that exercise, which does not exceed the strength, should be put in practice. A more severe degree of the disease will by and by be treated under tetanus.

Of Anasarca.

DCVI. Anasarca is a form of asthenia, distinguished by water betwixt the fill and the flesh, occasioning an external swelling of the body, without the signs of any suffusion *of the same fluid* into the interior parts.

DCIX. In the cure, the body muſt be invigorated, and in that part of it chiefly, where the greateſt laxity and atony prevails, that is the ſkin. This indication is anſwered by ſtimulating heat, by friction, by pure and dry air, by nouriſhing ſtimulant diet, and the Peruvian bark: No internal *local* affection gives occaſionto it, which may be known from the ſymptoms yielding to this plan of cure.

Of Cholic with Pain.

DCX. Cholic with pain is a form of aſthenia, and a higher degree of the cholic without pain; in which, to the ſigns of debility in common to all the aſthenic caſes, are ſuperadded a greater violence of the ſame ſymptoms, and twiſting pain about the navel, with pain in ſome part of the belly, often enormous, and ſometimes with a tumour, that can be felt externally (*b*).

(*b*) immediately above the brim of the pelvis, on the right-ſide, at the place of the blind-head of the colon.

Of the Dyspepsodynia, or Indigestion with Pain.

DCXI. Indigestion with pain is an asthenia, which adds to the symptoms of indigestion without pain, a pain and gnawing feeling in the region of the stomach, and is highly expressive of a very severe disease.

Of the violent Hysteria.

DCXII. The violent hysteria is a higher degree of the gentle hysteria; in which, besides the *symptoms* there described, mobility and changeability of mind, disposition to sleep, convulsive state, and a great resemblance to epilepsy, are conspicuous. The temperament, that favours hypochondriasis, is of an opposite nature to this, which is commonly called the sanguine. Both the temperament and predisposition in this case are produced by a moist, lax, set of simple solids.

Of the Gout of weakened Perſons.

DCXIII. The gout of weakened perſons, which is an encreaſed degree of the gout of ſtrong perſons, is that aſthenia, in which the inflammation runs out to greater length, and, at laſt, does not form at all; and the general affection encreaſes in violence, in obſtinacy, and, at laſt, attains its higheſt degree; exhibiting, towards the end of the diſeaſe, almoſt all the ſymptoms of debility, every form of aſthenia, and ſometimes by a falſe reſemblance, counterfeiting ſynocha.

DCXIV. As the diſeaſes affecting the alimentary canal, formerly mentioned (*i*), have, in a great meaſure, a common nature; ſo, theſe alſo, that is, the colicodynia (*k*), the dyſpepſodynia (*l*), the violent hyſteria (*m*), and the gout (*n*), are equally participant of the ſame, differing only from the former in their higher degree of violence. Their moſt diſtin-

(*i*) From DLVI. to DLXXVI.
(*k*) DCX.
(*l*) DCXI.
(*m*) DCXII.
(*n*) DCXIII.

guiſhed

guiſhed ſymptoms are either ſpaſm, which takes place in the cholic, and indigeſtion, both with pain, or a ſpaſmodic convulſive affection, diſtinguiſhing the reſt. But neither, in that reſpect, do theſe differ from each other in any thing eſſential; ſince they *all, without diſtinction*, depend not only on debility, but alſo nearly upon an equality in the degree of it, as the ſimilarity of their morbific powers and remedies proves. For a very full explanation of ſpaſm and convulſion go back to the following numbers, CLXXXVIII. to CXCV. and from the latter to CCI.

DCXV. For the cure of them all (*o*), abſtinence, fatigue, evacuations, acids, and aceſcents, cold, directly and indirectly debilitating paſſions, the debility ariſing from exertion of the intellectual function, and impurity of air, muſt be avoided. The cure of every one of them muſt be ſtimulant: When each of them is but ſlight, beef ſoup and ſimilar rich ones, which act partly by dilution, partly by a nouriſhing and ſtimulant operation, in the weak ſtate of the ſtomach, and by ſupporting the ſyſtem, and afterwards,

(*o*) Peruſe the whole of Chap. IX. Part II. from numb. CCLXXXI.

when

when the ſtrength is ſo far recovered, ſolid animal food, and moderately diluted drink, which, at laſt, confirm the ſtrength, are ſufficient. In a higher degree of violence of any of them, while the ſoups ſhould ſtill be continued, at the ſame time pure ſtrong drink ſhould be adminiſtered. And when the violence of any caſe baffles this whole form of ſtimulus, recourſe muſt be had to muſk, volatile alkali, camphor, æther, and opium. Theſe muſt be adminiſtered in large doſes; and all acid and fermenting things, every thing cold, though accompanied with ſtimulus, muſt be guarded againſt.

DCXVI. For the patient's management in the intervals, all debilitating powers muſt be avoided, ſuch as fatigue, abſtinence, cold, and exceſſive heat *(p)*; and take it for a certain and demonſtrated fact, that *the* fits *of recurrent diſeaſes* do not return from any inherent power of nature, but from human folly. Accept of that as a joyous piece of news, and ſuch as nobody ever expected. The recurrence of fits of the gout itſelf is not inavoid-

(*p*) See again the ſame Chapter, which compare with the preceding, the VIIIth of the IId Part.

able;

able (*q*); but, by guarding againſt the hurtful powers mentioned, may be repelled for any length of time; and, when it happens at any time to come on from the fault of the patient, it can often be removed in two hours, and almoſt always in as many days, and the *ſtate of* health ſecured in every reſpect. In all the ſame diſeaſes of ſimilar vehemence, whenever any ſtimulus, from a long continuation of its uſe, has begun to have leſs effect, we ſhould *lay it aſide, and* proceed to the uſe of another, from that ſtill to another, and in that way go over the whole circle (*r*).

Of Hypochondriaſis.

DCXVII. The hypochondriaſis is an aſthenia, in which, with the ſymptoms of dyſpepſy, there is a noiſe in the belly, flatulency, and uneaſineſs, and a rooted opinion in the patient, of the diſeaſe being always worſe than it is. The way is paved to the diſeaſe by a dry ſet of ſimple ſolids, and that temperament, in which there is a natural ſlowneſs to paſſion; which, however, once excited, riſes

(*q*) See par. DXCVII.
(*r*) XLI.

to the higheſt violence, and continues long with obſtinacy. It is further diſtinguiſhed by a fixed attention of mind, whereby the patient is liable to dwell to exceſs upon any purſuit or ſtudy, and not to be eaſily diverted to another, as alſo by a dry ſtate of the ſurface of the body, a rough ſkin, with black hair, and black eyes, and always a dark complexion and ſerious aſpect.

DCXVIII. From the definition given of it by hypochondriacs, it is beyond doubt an aſthenia, as being accompanied with a noiſe in the belly and flatulency; and the courſe of the diſeaſe diſtinguiſhed by ſlowneſs to paſſion, keenneſs in thinking, and that ſtate of the ſimple ſolids, which requires a high force of ſtimulant operation to procure, and keep up a ſufficient degree of excitement.

DCXIX. Since the ſtate of the ſimple ſolids is a ſtate given by nature, and not to be changed by art, and the only indication of cure left in the phyſician's power, is to fit a certain degree of excitement to that given ſtate, which is exactly the caſe in this diſeaſe; *it follows*, therefore, that the ſtimulus of food, drink, and others, ſhould be employed in the cure of hypochondriaſis. The patient ſhould

be

be kept cheerful, by *being placed in* agreeable company, and gay entertainments, by entering upon a journey, and amusing himself with the various scenes of nature and art through which he passes. He should ride, that, in guiding the horse, his mind may be more occupied. His studies and every subject of his *ordinary* contemplation should be often changed and varied. He should have generous wine given him to relieve the symptoms of his stomach and intestines, and to raise his animal spirits. And if these should fail of success, the diffusible stimuli, as opiates, should have their turn for a time, for the purpose of striking a stroke at once. And their use again gradually laid aside in proportion as the strength can now be supported by the more natural and accustomary stimulants. Darkness and bad air should be shunned; pure light, and all lively objects, should be sought after. No hypochondriac, even in a fit of delirium, should be provoked, but by every contrivance soothed (*s*).

Of

(*s*) I have heard of an hypochondriac so provoked at his physicians, who maintained that nothing ailed him, that he, on the contrary, to carry his opinion of his disease

Of Dropſy.

DCXX. Dropſy is an aſthenia, commonly in the form of an anaſarca, with a ſwelling in ſome viſcus, which, for the moſt part, at leaſt in the beginning, attacks ſome place in preference to others, and more than any other.

DCXXI. The cauſe of dropſy, in ſo far as it reſpects the collection of water, is eaſily explicable upon this doctrine, but altogether inexplicable upon any other. For the univerſal debility, that is laxity and atony, is chiefly predominant in the extreme red ar-

ſeaſe to the utmoſt; at laſt took it into his head, that it had attained its utmoſt height, by depriving him of his life. He continued obſtinately in the notion of his being dead, till a more ſenſible practitioner was called in to ſee him. This gentleman agreed that he was dead, but as he could not diſcern the particular cauſe of his death; he, therefore, propoſed to open the body: In ſetting about which, he made ſuch a claſhing with a great apparatus of inſtruments, provided for the purpoſe he intended, that the patient was rouſed from his obſtinate ſullenneſs, and allowed, that this gentleman had come nearer to his caſe than any of the reſt; but acknowledged, that he now found he had ſome remains of life.

teries, and the exhalants immediately continued from theſe, as well as in the commencements of the abſorvent veins; and, of the ſame kind of veſſels, it is often urgent in a particular part in preference to others.

DCXXII. As all the debilitating hurtful powers concur in producing this, as well as any other aſthenia; ſo thoſe powers have the greateſt influence in this caſe, that preſs moſt urgently upon the vaſcular ſyſtem. Hence, as *we ſee* in the converſion of peripneumony into the dropſy of the cheſt, profuſe bleeding, and a large draught of cold water, when the body is fatigued, over heated, and burned up with thirſt, are the moſt powerful agents in bringing on this diſeaſe. The hurtful effect of the latter of which, in every caſe of debility, when its operation is followed by no ſtimulus, has been more than ſufficiently explained above (*t*). Beſides, in this caſe, when all the veſſels are open, the water flowing to their moſt weak terminations, paſſing out by theſe, and being not all tranſmitted from the exhalants into the abſorbents, is collected into every neighbouring cavity (*u*).

(*t*) See par. CXVII. to CXXIV.
(*u*) LIX. LX. LXI.

And

And hence the commencement of the urgent ſymptom in this diſeaſe.

DCXXIII. To this aſthenia belong all the watery effuſions, which do not ariſe from a local affection, but depend on pure debility. And, therefore, if at any time any other form of aſthenia, whether from wrong treatment, or other hurtful powers, in its progreſs terminates in this effuſion; every ſuch caſe ſhould be held as a proper dropſy (*x*); and it ſhould be ever preſent to our recollection, that there are only two general diſeaſes, and that the diſtinctions hitherto received, are devoid of all ſolid foundation. Accordingly, both from other improprieties, and particularly from bleeeding, epilepſy, palſy, the gout, terminate in real dropſy. Nay, the ſame is the termination of peripneumony itſelf, when it is either converted into indirect debility, from the debilitating plan of cure having been puſhed to exceſs, or into direct debility, from having been left to itſelf, and the body not ſufficiently debilitated. The affections, confined to parts, which are conſidered as the remote

(*x*) See LXXXI.

cauſes

causes of dropsy, will be treated among the local diseases, to which they belong.

DCXXIV. After this explanation of the nature of dropsy, the cure of it, provided that it be a proper one, and early enough set about, ought by no means to be so much despaired of, as it should be when local affection, with a similar effusion, and the general disease are blended together without distinction, *and considered as one and the same* (*y*). If long before the effusion there was no internal complaint, if the disease rather came on suddenly, and in consequence of evident hurtful powers, and yields to the first part of the curative means, there is reason to doubt of a cure.

DCXXV. Besides the general indication of cure for asthenia, that *suited to this case* must be particularly directed to the whole vascular system, and especially about their terminations, and the commencements of the absorbent veins. The remedies are also the usual ones; that is diet, as nourishing and stimulant as

(*y*) Sometimes the predominant symptom rises to the degree of being above the power of the excitement, as in the tumor of schirrus, and the effusion here.

poſſible; firſt in a fluid form, when the ſolid cannot be admitted upon account of the debility of the ſtomach; then, alſo in a ſolid; and together with both ſtrong drink, ſuch as the beſt wine that can be got, fermented ſpirit, ſometimes pure, ſometimes diluted. If the diſeaſe does not yield to theſe, after their uſe has been continued for a proper length of time; recourſe muſt be had to the diffuſible forms: By this means, when the effuſion has not yet attained to that high degree that conſtitutes a local affection, not to be altered by any ſtate of the excitement, this aſthenia can be as eaſily cured as any other.

DCXXVI. But, when a great quantity of water has now got into ſome large cavity, it ſhould immediately be removed by the catheter; when that has been done, and the emptied cavity ſecured with as much care as poſſible, and the ſtrength ſupported by wine, ſtrong drink, and any ſtimulus more diffuſible, we muſt return to the management mentioned a little above. And if it ſhould likewiſe fail now, our judgment muſt be, that either the general diſeaſe has degenerated into a local, or that the affection has been local from the beginning.

Of

Of Epilepſy.

DCXXVII. Epilepſy is an aſthenia; the diſtinguiſhing ſymptoms of which are, ſome heavineſs of intellect, dulneſs in the exerciſe of the ſenſes; and then a very impaired ſtate, or temporary extinction of the latter, accompanied with various convulſions over the body: Fits, conſiſting of ſuch a concourſe of ſymptoms uſually return afterwards at uncertain ſpaces of time, and *each of them* terminates in a foaming at the mouth.

DCXXVIII. As all the debilitating hurtful agents are productive of this diſeaſe; ſo the loſs of the blood and other fluids, exceſs in venery, paſſions, ſuch as fear, terror, aſſiduous and intenſe thinking in great geniuſes; a deficiency of that kind of ſtimulus in ſtupid perſons, are particularly ſo (z). Theſe powers that produce the firſt fit, more eaſily bring on after ones: And beſides them, certain unuſual impreſſions upon the ſenſes, ſome of them diſagreeable, ſome highly agreeable; ſuch as

(z) See above par. CXXXIV. CXXXVII. and the addition; CXLII. and CXXXIX.

the flavour of ſome foods, the ſmell of a roſe, have the ſame tendency; and certain poiſons (*a*) are ſaid to have the ſame effect.

DCXXIX. But the appearance of ſymptoms is a thing full of fallacy, and, unleſs the nature of the hurtful powers producing them, and of the remedies removing them, be thoroughly underſtood, it is incomprehenſible. To ſolve the preſent difficulty about poiſons, and to ſettle *the queſtion*, whether the ſymptoms belong to univerſal, or local diſeaſe; we muſt conſider, whether the latter one produced by a vitiated ſtate of a part, ſuppoſe that part either the ſtomach or brain, ſuch a vitiated ſtate, as in ſome point of the lower extremities proves the cauſe of the aura epileptica; and whether this vitiated ſtate reſiſts the virtue of the remedies, that perform their cure by changing the excitement; or whether all the ſymptoms are either relieved or removed by the change of excitement. If the former is the cauſe, the affection muſt be conſidered as local (*b*); if the latter be the truth, the diſeaſe muſt be held for a general one, and a true, but a great aſthenia. Nor

(*a*) See XX.

(*b*) See above CCXXIV.

muſt

muſt we forget, that a great many ſymptoms of general diſeaſes, from the ſame origin, are diſſimilar; and many from different, nay, oppoſite cauſes are ſimilar; that many local ſymptoms have a great reſemblance to thoſe of general diſeaſes, and that they ſometimes, by a moſt falſe appearance, counterfeit epilepſy, ſometimes apoplexy, ſometimes certain other general diſeaſes beſides.

DCXXX. For the purpoſe of preventing this diſeaſe, we muſt both avoid other debilitating powers, and thoſe that have the greateſt power in producing it. The veſſels ſhould be filled, by giving food as nouriſhing, and as effectual in producing blood as poſſible; the indulgence in venery muſt be moderated, chearfulneſs and tranquillity of mind muſt be favoured, an agreeable train of thinking muſt be found, and all the objects of the ſenſes, which give them diſturbance, guarded againſt; the ſtrength muſt be fortified by recruiting exerciſe, by the peruvian bark, if the approach of the fits can be perceived, and by wine and the more diffuſible ſtimuli. A length of ſleep, that is a medium betwixt too long and too ſhort a continuance of it, ſhould be kept up. Stimulant heat ſhould be ap-

 plied;

plied; and all excefs of it as well as cold avoided (*c*). The pureft air, fuch as that in the fields, which is free from moifture fhould be fought after. The furface of the body fhould be excited by friction, and cleanlinefs, for the purpofe of cherifhing the organs of voluntary motion, that are moft clofely connected with the animal power in the brain.

DCXXXI. The fame remedies, which radically cure the gout, alfo cure epilepfy, and precifely in the fame manner (*d*).

Of

(*c*) See CXXIV. CXXVII. CCXXVIII. CCLXXVII. CXXXVII. CXXX. CCXXXVIII. CCXXXIX. CCLX.

(*d*) This paragraph is the anfwer to the queftion propofed in that which ftands in the Elementa, anfwering to the fame number. That paragraph therefore is erafed, and this put in its place. I had heard from fome of my pupils, that they had been able by their diffufible ftimuli, to remove epileptic fits. But in cafe of any miftake I would not venture to mark the fact for certain, which I have now done from my own perfect conviction. A young man lately married had the moft alarming fit of epilepfy that ever was: His cafe was thought beyond remedy; as an extreme one, however, he got from fome perfon the full of a tea-cup of tinctura Thebaica up to a blue ring a little below the brim. He got out of his fit fome how or other. But was perfectly ftupid and fenfe-

lefs

Of Palſy.

DCXXXII. Palſy is an aſthenia, in which, with the other proofs of the uſual debility, often with ſome degree of apoplectic fit, commonly all on a ſudden, the motion of ſome part of the body, and ſometimes the ſenſe *of feeling* is impaired. When the fit is ſlight and of ſhort continuance it terminates in health; but the conſequence of a higher degree and greater duration of it is death.

DCXXXIII. The hurtful powers, that uſually produce epilepſy and apoplexy, alſo tend to produce palſy. And beſides theſe, all the common debilitating powers that produce any aſthenia, directly or indirectly; great commotion of the nervous ſyſtem by means of too diffuſible ſtimuli; more affecting the circumference of the body, where the organs of voluntary motion are chiefly

leſs for a fortnight. Upon his falling into another I was ſent for, and brought him about in twenty minutes, as I am told, (for I did not wait,) ſo completely, that he got out of bed, and ate a hearty meal of beef ſtakes. Many weeks after, by miſmanaging himſelf, and neglecting directions given him, he fell into a ſlighter one, and was cured in the ſame way.

 ſeated,

ſeated, and the internal parts and the brain leſs; as is evident in ebriety, gluttony, and every ſort of intemperance; likewiſe an indolent way of life, which is commonly connected with theſe hurtful powers, have all the ſame tendency.

DCXXXIV. When the diſeaſe has once taken place, as it is kept up equally by directly and indirectly debilitating powers; ſo

DCXXXV. For the indication of cure, which is preciſely the ſame as in epilepſy as the energy of the cauſe operates more immediately upon the ſurface of the body, conſequently, according to what was ſaid upon the ſubject of epilepſy, the principal remedies are thoſe, that have the greateſt power in invigorating the ſurface of the body: Such are friction, geſtation, that degree of exerciſe which the ſtrength can bear, for the purpoſe of rouſing by their powerful operation, the languid excitement in the fibres of the muſcles; likewiſe a proper degree of heat, of pure air, and therefore, as much as poſſible, the open air; laſtly, as none of the powers endued with ſtimulant virtue, by any means ſhould be omitted, in order that the excitement, which is of great conſequence in every cure, be more

more equal and vigorous all over; ſo in that extreme debility which produces ſuch an impotency of voluntary motion, as it is of the greateſt conſequence to make an impreſſion upon the principal ſymptom; we ſhould, therefore, *employ* a great deal of an opiate, (CXXX. and CCXXX.) the influence of which, upon the ſurface, is the moſt conſiderable *of all* other powers, and preſs the cure, till ſome commencement of returning motion be procured; and then, without neglecting the aſſiſtance of any of the other ſtimuli, but uſing them all in concourſe or ſucceſſion, for the ſake of rendering their common effect more powerful and more equal, to eradicate the diſeaſe.

DCXXXVI. Debilitating and evacuant powers are to be avoided for this reaſon, that it is not vigour, it is not an over-proportion of blood, but a ſcantineſs of the latter, and a deficiency of the former, that is the cauſe.

Of Apoplexy.

DCXXXVII. Apoplexy is an aſthenia, reſembling the two juſt now mentioned, in its cauſe and cure, differing in the appearance of the ſymptoms,

ſymptoms, which makes no difference in the truth (*e*): In which, beſides the ſymptoms in common to it with them and the other aſtheniæ, all of a ſudden, ſenſe, intellectual energy, and the voluntary motions, are impaired, the reſpiration remains, but with ſnoring, the pulſe is weak, and the whole fit is finiſhed with the appearance of a profound ſleep (*f*).

DCXXXVIII. The heads of the patients are large and not well formed, their necks ſhort and thick: The diſeaſe ariſes from both direct and indirect debility, but chiefly from the latter. Of the indirect debilitating powers, the moſt powerful is the luxury of food, drink, and ſloth, which, after its courſe of ſtimulating and filling the veſſels is run, is truly debilitating and productive of a penury of fluids: And, as each ſort of debility is encreaſed by the other, and conſequently the indirect by the direct, ſo that is remarkably the caſe in this diſeaſe. Hence the effect of the debilitating plan of cure is ſo pernicious in apoplexy, that it is received as a rule, that

(*e*) LXXXI. DXXIX.
(*f*) CLIII. CC.

the

the third fit is not often, the fourth never, got the better of.

DCLXXXIX. The cauſe of epilepſy, palſy, and apoplexy, is the ſame with that of every aſthenia; affecting the head leſs in palſy, excepting in the beginning and end, but greatly in the two others; and in all the three producing a diſturbance in the organs of voluntary motion. This diſturbance, whether the motion be deſtroyed or diminiſhed, in convulſion ſeemingly encreaſed, amounts to the ſame thing, and, as was formerly explained, depends upon debility (*g*).

DCXL. The ſame here too is the indication of cure; with that, which runs through this whole form of diſeaſes, and the force of the remedies is eſpecially, and as much as poſſible, to be directed to the parts moſt affected. To prevent, therefore, the fits, in every reſpect alarming and full of danger, we ought to recollect, how far indirect debility has a ſhare in producing this diſeaſe, and how far the direct concurs with it; and alſo conſider the operation of a greatly advanced age. All exceſſive ſtimulus, therefore, muſt be avoided

(*g*) LVIII. CCXXX.

in ſuch a manner, that the body may be invigorated and direct debility guarded againſt, the ſtimulant plan of cure ſhould be ſet on foot with moderation and accuracy; and, in the place of the forms of ſtimuli, that have, either from long or exceſſive uſe, loſt their ſtimulant operation, according to the rule of nature, others, which the excitability, yet not worn out with reſpect to them, can receive, ſhould be ſubſtituted, that is, the kinds of food, of drink, and of diffuſible ſtimuli, ſhould be changed all round, and upon the failure of each lately uſed one, to return to thoſe that have been long ago laid aſide (*h*).

DCXLI. The three diſeaſes we are treating of, are commonly ſuppoſed to ariſe from a plethora, attacking the head, and proving hurtful by compreſſion upon the brain. But, beſides that, plethora has no exiſtence in any caſe where it has been ſuppoſed (*i*), at that extreme age at which thoſe diſeaſes happen; or ſometimes in epilepſy, when it affects weak and ſtarved children, how can the blood be in over-proportion? Can penury of food, which

(*h*) CCCI.

(*i*) CXXXI. CXXXIV. DXLIX. DLV.

alone

alone is the matter that forms blood in the latter, and in the former a vigour long gone, create an over-proportion of blood, and not, on the contrary, a penury of it?

DCXLII. As plethora has then no ſhare in inducing thoſe diſeaſes, ſo neither is an effuſion of blood or of ſerum (*k*) upon the brain, to be accuſed of it. Nay, a ſimilar effuſion happens in every caſe of the veſſels, from great debility as well as in this caſe.

Of the Lock-Jaw.

DCXLIII. The lock-jaw is a leſs degree of tetanus, its ſpaſm being confined to the lower jaw and the neighbouring parts. This is a rare affection, without others equally conſpicuous; as being a formidable ſymptom of fevers and wounds. When the former of theſe happens, it will be treated of in fevers; when the latter, it will give occaſion to an enquiry, whether it belongs to local or general diſeaſe.

DCXLIV. Since it never ariſes immediately after a wound is inflicted, but uſually happens, either when the latter is healed up,

(*k*) CXXXVII. and the addition.

or after a confiderable interval of time; *the inference from that* is, that it either arifes from the violence and duration of the pain, which is always a caufe of very much debility, or from that debility, which the ufual antifthenic plan of cure produces, or from an unknown taint in the fubftance of the nervous fyftem.

DCXLV. That it depends upon debility we have reafon to believe, from every fort of fpafm always depending on debility (*l*); from tetanus, which is precifely the fame affection, only differing in degree (*m*), having no other origin; and, in fine, from the fuccefs of the ftimulant plan of cure in this as well as all other fpafms; and the want of fuccefs of the antifthenic, or debilitating evacuant one. All the other particulars regarding this fubject will be taken notice of under *the* next *head of difeafe* tetanus.

Of Tetanus.

DCXLVI. Tetanus is an afthenia, and, therefore, always affecting perfons under debility, whether direct or indirect; in which, fome-

(*l*) CLXXXIX. CXI.
(*m*) CCXXVIII.

times

times with confciousnefs, fometimes not, fometimes with difficulty, fometimes with freedom of refpiration, the whole body, or the neck and its neighbourhood only, are bent fometimes forward, fometimes backward, and held faft by a rigid fpafm.

DCXLVII. Tetanus is the offspring of cold countries, as the northern parts of Europe, but rarely; more frequently of the warm fouthern regions of that divifion of the world; but moft frequently of the torrid zone. The rare *cafe*, fuch as that among us, is the fequel of a debility fcarce ufual in other general difeafes: On the contrary, it almoft always arifes from that unufual debility, which is occafioned by a lacerating wound, through which fractured bones are dafhed, increafing the fum of that debility that exifted before, or that happened to be induced in the courfe of the cure. To produce the more frequent *cafe*, or that moft frequent one of all, which is quite common in the torrid zone, the moft powerful of the debilitating powers, and a very great many, if not all of them, concur. The moft powerful of thefe is, that degree of heat, which is intolerable, to perfons enaged in exercife

ercife or labour (*n*), to whom almoft only, and therefore to the flaves, it is hoftile. Hence, even under the flighteft corporeal motion, fatigue, and fweat, are produced (*o*), and from the fweat a fcantinefs of blood and other fluids. From all thofe arifes a languor over the whole body, and, therefore, in the ftomach (*p*): From the languor of the ftomach there is a puny appetite, and food, which is another caufe of penury of the fluids, is either not taken in, or thrown up again. All thefe *affections*, as well as that indolence both in mind and body, which is infeparable from fuch a ftate of circumftances, are followed by the higheft degree of debility over the whole body: And, as the moft noxious power, the intenfe heat diftreffes the head more than any other part, as well as the organs of voluntary motion, whether in the neighbourhood of the head, or more diftant from it; that is the caufe of the urgent fymptom, the fpafm, occupying the parts that have been mentioned.

(*n*) CXXVII. and the addition.

(*o*) CXV. CXXXVII. and addition.

(*p*) CLXXXVI. CXCIV. to CXCVIII.

DCXLVIII.

DCXLVIII. As tetanus *is* occaſioned by all the debilitating powers, according to the different degrees *in which they poſſeſs that effect*, and, conſequently, like every other aſthenia, depends upon debility as its cauſe; and, as all the aſtheniæ are removed by remedies, exciting the whole ſyſtem in ſuch a manner, as to exert the greateſt influence poſſible upon the labouring part; the ſame, accordingly, is the nature of tetanus, however little that diſeaſe has been underſtood, the ſame ſimplicity of nature is found in it: And if there is occaſion in it for the very higheſt remedies, that circumſtance ſhows, that the whole diſeaſe does not depend upon the ſpaſm, *and* that the labouring muſcles are not its whole ſeat, but that there is vaſt debility in every part, *only* greater in the muſcles, than in any other equal part, according to the law we have mentioned (*q*).

DCXLIX. From what has been ſaid, after tetanus has taken place, and upon account of the teeth being ſhut by the lock-jaw, there is neither acceſs to the weaker and leſs powerful ſtimuli of food, drink, and ſuch like, which are often ſufficient for the cure of diſeaſes of

(*q*) XLIX.

leſſer debility, nor any *ſenſe in* uſing them; we muſt, therefore, immediately have recourſe to the moſt powerful and the moſt diffuſible ſtimuli poſſible, and continue their uſe without regard to quantity, not even that of opium itſelf, till the whole tumult of the diſeaſe is allayed (*r*).

Of Intermittent Fevers.

DCL. Paroxſyms, conſiſting of a cold, hot, and ſweating fit, are a ſort of phœnomena that occur in every intermittent; and, in a certain proportion, in every remittent fever. They often come on in conſequence of a certain taint received from neighbouring moraſſes, or from a ſimilar ſtate of a neighbouring ſoil; *but they alſo happen, and* often *too*, after an application of cold only (*s*); at other times

(*r*) CCXCV. to CCCII.

(*s*) as in the vernal intermittents in Scotland. In the Mers, or county of Berwick, where I laboured three months under a tertian, that is, from the beginning of March to the beginning of June, and in the Carſe of Gowrie, and ſome other places in that country, nothing is more common than the tertian ague happening at the time at which I was affected; and nothing is more certain

times after that of heat only (*t*), when the common aſthenic hurtful powers accompany either (*u*): And they return with a remarkable exacerbation, after a temporary ſolution of the diſeaſe, or an abatement of it; in the cold fit, exhibiting manifeſt debility; in the hot, counterfeiting a deceitful appearance of vigour; and ſcarce ever obſerving any ſtrict exactneſs in the time of their return (*x*); but returning ſooner in a higher, and later in a lower, degree of the diſeaſe; and not un-

tain, than that cold and moiſture are the chief powers inducing it. It is ſomewhat ſtrange, that a man born in that country, if he would patch up a ſyſtem of fevers, ſhould have overlooked a form of them, that occurred to his eye-ſight every day, and borrowed his hypothetical courſe from a marſh miaſma, ſuppoſed to be the produce of great heat and moiſture, though he had only heard or read of the intermittents of warm countries.

(*t*) In the warm countries agues often occur, when it it eaſy to diſcern heat to be an hurtful power; but when moiſture is much leſs prevalent, for that very reaſon that the heat is prevalent, than at other ſeaſons when the diſeaſe does not occur.

(*u*) "Utramque" is corrected into "utramvis" in the Latin.

(*x*) Dr. Sydendam was content to count the periods by the day, which was even too particular, but Noſology has refined the matter into the wonder of exactneſs to an hour.

frequently, besides the remittent, also gradually assuming a continued form; and, on the contrary, sometimes without interference, oftener in consequence of an improper method of cure, before the disease is ended, changing into quintans (*y*), septans (*z*), nonans (*a*), or into sextans, octons, and decans (*b*).

DCLI. The fever of this kind, which rereturns every fourth day, and is therefore called a quartan, is milder than that which receives the name of tertian, from its recurrence being on the third day, and the latter is milder than that which, from its return every day, is denominated quotidian. The disease, that degenerates into a remittent or continued form, is of a worse nature than that which is regular in its returns, or that which puts off fits, and protracts the intervals *betwixt them:* And, the form and type of each case being given, the whole set is both of more frequent recur-

(*y*) Where the fit does not return till the fifth.

(*z*) Where its return is not till the seventh day.

(*a*) Where the intermission continues till the ninth day.

(*b*) That is, prolonging their intermission till the sixth, eighth, or tenth day.

rence, and of a more ſevere kind in hot, than cold, climates.

DCLII. That this ſort of fever depends upon debility throughout the cold fit, is proved by the ſymptoms, by the exciting hurtful powers, and by the method of cure, whether ſucceſsful, or the contrary.

DCLIII. The whole diſeaſe, as well as every paroxyſm, begins with a ſenſe of cold, the greateſt deſire for a warm ſituation, (*c*), with trembling, and that ſhaking motion in which the whole body is lifted up from the bed (*d*), with paleneſs, dryneſs, and ſhriveling of the ſkin, with the diminution of tumors, and drying up of ulcers, that the patient may happen to have had *before the arrival of the diſeaſe*, with an impaired ſtate of the intellectual faculty, a want of ſteadineſs in its exertions, and ſometimes delirium, with a dulneſs of ſenſation, languor of ſpirits, torpor of the

(*c*) I remember yet, that it was the higheſt luxury for me, when the cold fit came on, to be put in bed, and covered under ſuch a load of blankets (for the cold of ſheets was intolerable) as would, at any other time, have oppreſſed me. I was then about eleven years of age.

(*d*) By authors and lecturers in Latin abſurdly called rigor.

voluntary motions, a liſtleſneſs of mind and body in all the functions, in fine, a manifeſt debility.

DCLIV. If terror, horror, cucumbers, cold melons, famine, debauch in eating and drinking, food of difficult digeſtion, have been found for certain, to have a great effect in bringing back paroxyſms, after a long intermiſſion of them; if in cold ſituations, where cold is the principal hurtful power, it is the poor pecple, who are ill clothed, ſtarved in their diet, and enfeebled by labour, who in general are only affected with diſeaſe; if in warm regions of the globe, thoſe who have been moſt expoſed to debilitating hurtful powers of all kinds, who, in preference to others are ſeized with it (*f*); if in moiſt places, thoſe who live well in their diet, and cheer themſelves with their bottle, eſcape the diſeaſe (*g*), and water drinkers and perſons in

(*f*) See DCXLVII.

(*g*) as in Holland; where the Dutch ſtudents who live not near ſo well as the Engliſh, are very liable to the diſeaſe, while the jolly living Engliſh, who do not like the weak rheniſh wines, and the weak ill managed vin de Bourdeaux, which is a cheap dirty claret, almoſt never fall into the diſeaſe at Leyden, while the Dutch are perpetual victims to it as often as it is epidemic.

a ſtate

a ſtate of inanition from low living peculiarly experience it; all theſe facts ſhow, how far this diſeaſe is from depending upon heat and moiſture alone; *and prove*, that it alſo ariſes from cold, and not from either alone, but alſo from all the uſual hurtful powers, like every other aſthenia.

DCLV. Further, if every kind of evacuation, as often as it has been tried, is found, without the poſſibility of a doubt, to be hurtful; if no perſon in his ſenſes has ſcarcely ever, attempted bleeding (*h*); if, before the Peruvian and ſome other barks of ſimilar operation were found out *to act as remedies*, a variety of ſtrong drinks (*i*) were uſed

(*h*) They have talked of taking a little blood in the ſpring intermittents, but that was a theory of Dr. Sydenham's, who divided the diſeaſes of the whole year, into inflammatory and putrid; and I do not find, that that idea has ever been followed in practice. For though they follow him moſt ſervilely in moſt reſpects, eſpecially where he is wrong, their vanity, that they may now and then ſeem to ſtrike out ſomething from themſelves, diſpoſes them to differ from him in others, eſpecially where he is right, as in the rejection of purging in ſome ſthenic diſeaſes (CXXXVII).

(*i*) as ale, wort, wine, ſpirits, ſtrong punch, Riverius followed this plan; and I remember it was a

 cuſtom

ufed with fufficient fuccefs; and if it now alfo is found and demonftrated in fact, that the diffufible ftimuli are by far more effectual than any bark; nay, that the bark often fails, while they are perfectly effectual in the re-eftablifhment of health; from this fort of argument and certainty in point of fact, we derive the moft folid conviction, that there is nothing in this difeafe different from other aftheniæ, but that it perfectly agrees with them in the exciting hurtful powers, in the caufe, and in the cure. And, if it differs in the appearance of the fymptoms, that fhews no difference of nature, and not even any thing unufual; as all the aftheniæ that have been mentioned, however much they

cuftom among the common people to cure themfelves by getting tipfy. But I was allowed neither the one method of cure, nor the other. The authority of Dr. Sthaal and Boerhaave, had thrown the bark into difrepute in Britain: And my mother, "who trufted in God, and not in phyficians," left me to the courfe of defires and averfions, which were chiefly to avoid cold, and anxioufly feek for heat. She kept me upon a vegetable diet in the intermiffions, which I even then did not much like. It was the kindly warmth of fummer, which then fet in early, that had the chief effect in gradually finifhing that cure

have

have been proved to be the ſame (*k*), differ notwithſtanding, in a ſimilar manner, from each other, and ſymptoms lead not to truth, give no real information. For, though preciſely the ſame ſound functions flow from the ſame ſtate of perfect health; yet when the latter is ſo changed, as that the excitement is either encreaſed or diminiſhed, the functions are changed from the ſtandard into every ſort of appearance, in ſuch ſort, however, that they point out no difference in the cauſe, as has been commonly believed, and not always even a difference of degree (*l*).

DCLVI. Accordingly, *the following demonſtrated* facts of ſpaſm, convulſion, tremor, inflammation from weakneſs, deficiency of menſtruation (*m*), bleeding diſcharges (*n*), loſs of appetite, thirſt, nauſea vomiting, diarrhæa with pain, diarhæa without pain, and all the other aſthenic affections (*o*), ariſing from one

(*k*) See par. LXXI. and the addition. LXXXI. DCXXIX.

(*l*) DIV. DVII.

(*m*) DXLV. and the following paragraph.

(*n*) DXLVIII.

(*o*) CLXXVI. to CXCV. and to CXCVII.

and

and the ſame cauſe, and being removed by one and the ſame operation of the remedies (*p*), and, not even in their morbid ſtate, expreſſing degrees of debility in ſuch a manner, as that it can be thought proper to take any order of arrangement from that *mark*; all theſe ſerve to confirm the obſervation juſt now made, and, by *their* analogy, to demonſtrate, that the fevers alſo are diſtinguiſhed by intervals of freedom from febrile ſtate ſometimes greater, ſometimes ſcarcely perceivable, in common with what happens to many other diſeaſes, not from any peculiarity in the cauſe, but from a variation in its force. If fevers ſometimes intermit their febrile impulſe, ſometimes exert it more remiſsly, and ſometimes, by performing the latter imperceptibly, go on almoſt in a continued career (*q*); do they, in that reſpect, differ from the gout (*r*), which never goes on with an equal

(*p*) CCXXII. DLVI. DLXI. DLXXI. DLXXIII. DLXXIV. to DCXCV. and from that to DCXCVIII. Look alſo carefully over the whole IVth Chapter of the ſecond part.

(*q*) DCL.

(*r*) When the gout in the old way, is left to patience and flannel and low diet and watery drink, it ſhews both

equal force, but abates from time to time; and even, when it has interpoſed an interval of health, returns with more ſeverity than ever? Or do they differ from aſthma, as well as many other diſeaſes, in all which the ſame thing preciſely happens? And what is more uſual, in indigeſtion, and often violent vomiting (*s*), accompanied

both remiſſions and conſiderable intermiſſions. I have been often mortified, at finding, in conſequence of walking a little too freely, when I thought the fit was gone, a more violent return than the firſt part had been; when I had not yet attained to the full knowledge of the nature and management of that diſeaſe. Which is a circumſtance, that every podagric, who is ſtill treated in the old way, can bear witneſs to. Dr. Sydenham fell a victim to his ignorance of its nature.

(*s*) A gentleman in Scotland, came to dine with his brother, who lived with me, and my family in a houſe in the neighbourhood of Edinburgh. He ate and drank ſo ſparingly, that I predicted, from a knowledge I had of his manner of living, which was an exceſs of temperance and abſtemiouſneſs to a faulty degree, that if he did not indulge a little more in theſe reſpects, he would ſoon fall into a diſeaſe of debility. The prediction was verified in a few days; when his brother having occaſion to go to town, found him, in the intervals of a violence of vomiting, making his teſtament. By a good doſe of the diffuſible ſtimulus, he removed the whole diſeaſe at once, and enabled him, with the additional help of ſome good ſound port and genuine Madeira, in a few minutes to eat heartily

accompanied with a rage of other ſymptoms, than the intervention of intervals of the greateſt relief? The ſame is the nature of the chin cough (*t*) the ſame as that of the aſthenic cough (*v*). In fine, where is there one of all the ſthenic, or all the aſthenic diſeaſes, the morbid career of which continues the ſame from beginning to end? There is none(*u*). For,

heartily of beef ſtakes. Before his brother's arrival he had been treated in the uſual evacuant, and, as they call it, the antiphlogiſtic way. Upon the return of his medical friends a gliſter was preſcribed, which threw him back into his diſeaſe, from which, with the ſame eaſe and in the ſame ſhort ſpace of time, he was extricated upon his brother's return to his poſt. This young gentleman from that beginning, like many other of my pupils, is now a moſt reſpectable man in his profeſſion. Some time after that, he performed the greateſt cure, that ever happened ſince the firſt annals of medicine. In a very dirty ſhip, the Dutton, which was going to the Eaſt Indies, he ſtemmed, in the latitude of Rio Janeiro, a fever that was carrying off numbers every day, loſing not one; as can be atteſted by the ſhip's books, for no leſs than five weeks—his name is Dr. Campbell.

(*t*) See 579.

(*v*) And from DLXXXVII. to DXCVII.

(*u*) All this confirms, and not only the point at preſent meant to be ſettled, which is that the diſtinctions, that phyſicians have made about the differences of fevers, are without

For, as life in all its ſtates (*x*) is always in proportion to the action of the exciting powers, upon the excitability, and both prediſpoſition to diſeaſes, and diſeaſes themſelves ſupervene in proportion to its being greater or leſs than the proper degree; ſo the courſe of diſeaſes follows the ſame rule; and, according to the variation of the degree of that action, is one while encreaſed, another while diminiſhed, another while exhibits a temporary eruption; juſt like what happens in this ſort of fevers.

without all foundation, and that they are all the ſame with no other difference but in degree, and that, unleſs in that reſpect, they do not differ from other diſeaſes of the ſame form; but it likewiſe adds additional weight to our fundamental propoſition, that we are nothing in ourſelves, but according to the powers acting on us. Many circumſtances in the courſe of diſeaſes, that eſcape the obſervation both of patients and phyſicians, are of hourly and momentary occurrence, and ſufficient, when their importance is weighed according to the principles of this doctrine, to account for the variations in the progreſs of diſeaſes. We ſhall, by and by, ſee that the circumſtance of heat, from the gratification of indulging in which the patient is not to be turned aſide by any advice, is, with its conſequences upon the whole ſyſtem, ſufficient to account for the gradual converſion of the cold into the hot, and the hot, into the ſweating, ſtages.

(*x*) See par. IX.

DCLVII. The

DCLVII. The caufe of them is the common one of all afthenia, whether febrile or not; but under fuch direction and application *to the fyftem*, that, after an interval of fome hours, all their morbid energy departs entirely, or in fome degree. And the reafon of that is, that the exciting hurtful powers in the fame proportion are either removed, or more gentle in their operation; in one word, the excitement is encreafed for the time. The variation of types is not owing to a matter, fubject to the fame variation: For, if that were the cafe, how could the fame cafe run through all the forms, fometimes of intermiffion, fometimes of remiffion, and at other times of nearly going on with a continued movement and the contrary? Is the matter, which is fuppofed to produce each form, in order to produce another form, changed into that matter, which is fuppofed neceffary to the latter (*y*)? Is the vapour, or, as they call

(*y*) The ancients fuppofed, that every type arofe from a matter fuited to produce it. Now, fuppofe a quotidian type to depend upon any given matter, and a tertian upon any other, different from that; when either type is changed into the other, are we to fuppofe that the matter is alfo changed, and fo forth of the reft?

it,

it, the effluvium, proceeding from animals, which is ſuppoſed to produce any typhus, or continued fever, and, therefore, the Ægyptian one, when this is changed into an intermittent, or remittent nature, alſo, together with the change of type, changed into a marſh miaſma, or defilement ariſing from moraſſes, which is ſuppoſed to produce that form *of fever?* Or rather does the matter, which at firſt produced each type, *ſtill* continue *the ſame*, and become the cauſe of another form? If any perſon ſhould fix upon the latter *as being the truth*, how ſhould the ſame cauſe produce different effects? *But*, if he inclines to adopt the former ſuppoſition, what proof is there, that can be admitted upon any principle of reaſoning, that, as often as the form of the fever changes, ſo often its cauſe, the matter, is alſo changed? It has been already proved, that marſh miaſmata, or defilements, are not the cauſe (z). And it ſhall be by and by evinced, that the animal effluvium, or vapour, ariſing from the body, when affected *with a continued fever*, is not: Nay, it has been proved by the moſt ſolid arguments, that neither is any other matter

(z) DCLIII. DCLIV. DCLV.

taken

taken into the body, either in this or any caſe, that which produces the diſeaſe, and that the change of excitement alone is the univerſal ſource of all general diſeaſes (*a*).

DCLIX. To enquire into the return of fits; it is not peculiar to this form of fevers, to have a return of the general affection after its temporary ſolution; the ſame thing happens to the gout, as often as a return of the diſeaſe again ſucceeds to a return of health (*b*), and for the ſame reaſon (*c*): For, as thoſe diſeaſes are repelled by invigorating means, ſo they are brought back by the debilitating powers, which were their firſt cauſe. Accordingly, when the diſeaſe is left to itſelf, when it is treated by a debiliteting plan of cure, it perſeveres in returning; when it is treated with Peruvian bark, and ſtill more certainly by the forms of wine and diffuſible ſtimuli, and when that mode of cure is perſiſted in, till the ſtrength is quite confirmed, it never returns.

(*a*) See the paragraphs XXII. XXIII. LXII. and addition LXIX. LXX. LXXII. LXXIII. and LXXXVIII.

(*b*) DCLVI.

(*c*) DCLVII.

DCLX.

DCLX. The tertian vernal fevers of Scotland go off without medicines, in procefs of time, firft in confequence of the heat of the bed, and then, as the fummer fets in, by bafking in the rays of the fun, and by a moderate ufe of food and ftrong drink, *their duration* commonly *not exceeding* the fpace of three months. In all the fouthern regions, and even in England, the Peruvian bark, when the whole cure is entrufted to it, often fails, and they are not removed but by very diffufible ftimuli (*d*).

The

(*d*) Dr. Wainman, as it was faid before, found that to be the cafe in the fens of Lincolnfhire. From which we may learn how little dependence is to be had on the facts in medicine, as they are delivered from defks or in books; from both which we have always been taught to believe, that the Peruvian bark was a catholicon in intermittent fevers. But, if it fails in the cure of the mild ftate of that difeafe in this country, what muft we think of its efficacy in the malignant intermittents and remittents of the warm countries? And, if that medicine, with its univerfal high character, fhall turn out next to an impofition, what are we to think of teftimonies in favour of any thing? One of the ways of adminiftering the bark is in ftrong wine or fpirit, and it can hardly be doubted, but in that compound form it may have been of fervice. But where fhall we find a panegyrift on the bark, who will make any allowance

CCLXI. The debility during the cold ſtage is the greateſt, that of the hot leſs, and that of the ſweating ſtage, which ends in health for the time, is the leaſt of all. Hence, in a gentle degree of the diſeaſe, as cold is the moſt hurtful power, the conſequence is, that its effect is gradually taken off by the agreeable heat of the bed or of the ſun, and the ſtrength, thereby gradually drawn forth. The heart and arteries, gradually excited by the ſame heat, acquire vigour, and at laſt, excited in their perſpiratory terminations by the

allowance for the powerful medicine conjoined with it? They talk of it as a vehicle, without allowing it any other credit. In the ſame manner, at all times, have many powers of great operation been overlooked in the accounts given us of remedies, and the merit of the cure imputed to the moſt inert. I have moſt generally found an analogy betwixt the remedies, that are, in reality, powerful, and our ordinary ſupports of health. The wines and ſtrong drinks are certainly a part of diet with moſt people, and ſo is opium among the Turks. But what analogy can be found betwixt the ſame ordinary ſupports of life, the ſame durable and natural ſtimuli, and the bark of a tree, whether brought from South America, or growing among ourſelves? I will not pretend to ſay, that the bark is devoid of all virtue; but I muſt have greater proofs of its power over diſeaſe than I have yet met with, before I can retract much of what I have ſaid.

ſame

fame ftimulus the moft hurtful fymptom being thereby removed, they reftore the hot fit, and afterwards carry on the fame procefs to the breaking out of fweat.

DCLXII. When the force of the difeafe is greater, thefe powers are ineffectual; and, unlefs the moft powerful remedies are applied, the difeafe, inftead *of producing* intermiffions, rufhes head-long into the remittent ftate only, or even into thofe very obfcure remiffions, which give the appearance of a continued difeafe.

DCLXIII. And, fince in every cafe of difeafe of any energy, the difeafe returns, for this reafon, that either the leffer force, by which it is kept up, is not ftopt by a leffer force of remedies, or the greater force of the former by a greater force of the latter (*e*); the remedies, therefore fhould be given both before the cold fit, and during it, as alfo through the whole courfe of the intermiffion to the next paroxyfm, and they fhould be continued even through this, and after it is over. Laftly, like the practice in every other cure of afthe-

(*e*) For the curative force muft be always accommodated to the morbific, or caufe of the difeafe. See above XCII. CIX.

nic diſeaſes, we ſhould gradually recede from *the uſe of* the higheſt ſtimuli, in proportion as the body can now be ſupported by the leſſer and more natural *(f)*.

Of the ſevere Dyſentery.

DCLXIV. The ſevere dyſentery, or bloody-flux, is an aſthenia; in which, beſides the ſymptoms in common *to that whole form of diſeaſes*, ſo often now repeated, there are pains in the inteſtines, gripes, innumerable dejections, chiefly mucous, ſometimes bloody, for the moſt part without the natural *matter that paſſes that way*, all which happen often after contagion has been applied.

Of the ſevere Cholera.

DCLXV. The ſevere cholera adds to the common ſymptoms of every aſthenia, *thoſe of* vomitting and purging alternating with great violence, and for the moſt part conſiſting of bilious matter.

(f) CV. and CVII.

Of

Of Synochus.

DCLXVI. Synochus is a very mild typhus, and ſuch as chiefly happens in cold countries and cold ſeaſons; in the beginning deceiving phyſicians by a certain reſemblance to ſynocha, but a counterfeit one.

Of the ſimple Typhus or Nevous Fever.

DCLXVII. The ſimple typhus, or nervous fever, is ſuch a ſynochus, as appears in warm countries or ſeaſons, but ſomewhat more ſevere, and yet ſufficiently ſimple.

Of the Cynanche Gangrenoſa.

DCLXVIII. The gangrenous cynanche is a typhus, a little more ſevere than the ſimple typhus, or nervous fever, with an eruption upon the ſkin, and a red tumid inflammation of the throat, and with mucous cruſts of a whitiſh colour, and concealing ulcers below them. The end of the angina, formerly mentioned (*g*), equals or exceeds the violence of this diſeaſe.

(*g*) CCXII. CCXIV.

Of the confluent Small-pox.

DCLXIX. The confluent ſmall-pox is a typhus chiefly depending upon indirect debility. It is preceded by a great eruption of the diſtinct kind, and an univerſal cruſt of local inflammation over the whole body; *which*, by their local and violent ſtimulus, convert the ſthenic into the aſthenic diatheſis, and the inflammatory affection into a gangrenous one. Its cure is to be conducted upon the ſtimulant or antiſthenic plan, but in ſuch a way, however, as is ſuitable to indirect debility.

Of the peſtilential Typhus, the jail, putrid, or petechial Fever, and the Plague.

DCLXX. The peſtilential typhus, or the jail, putrid, and petechial fever, is an aſthenic diſeaſe of the higheſt debility, ſcarce excepting the plague itſelf; in which the ſurface of the body is firſt dry, pale, hot, ſhrivelled; then, chiefly towards the end, moiſt, drivelled with ſpots, and colliquative ſweats, diverſified with vibices, or long ſtrokes like

thoſe

thoſe laid on by a whip, and waſted with colliquative diarrhœa; in which the ſtomach is affected with want of appetite, loathing of food, nauſea, often with vomiting; in which the belly is firſt boundiſh, and then, as it has been ſaid, ſubject to colliquative evacuation; in which the intellectual function is firſt impaired, then becomes incoherent, afterwards delirious, and that often in the higheſt degree; in which the ſpirits are dejected and waſted with ſadneſs and melancholy; in which the voluntary motions are early impaired, and then ſo deſtroyed, that the patient cannot be ſupported in his poſture in bed by his own muſcles, or *prevented* from ſlipping down, from time to time, from the upper to the lower part, and the ſenſes are either blunted, or preternaturally acute. In fine, the urine, the fœces, the breath, and all the excrementitious diſcharges, have a ſingular fœtid ſmell.

DCLXXI. The plague begins, holds on in its courſe, and ends with ſimilar ſymptoms: To which, however, carbuncles, buboes, and anthraces, or fiery ſores, are added. Theſe are moſt frequent in the plague, but not ſo confined

confined to it, as to be excluded from the pestilential fever (*g*).

DCLXXII. Contagious matter sometimes accompanies typhus, always the plague: The former is of a common nature, or such as is liable to happen in any part of the globe; the latter is thought peculiar to the eastern part of Europe, and the western of Asia, possessed by the Turks, called the Levant.

DCLXXIII. With respect to the contagious matter of typhus; the corruption of the fluids is by no means to be imputed to it (*h*), nor is heat so much to be blamed; for cold has an equal power in producing that effect as heat (*i*), as has also every thing, as well as heat, that either directly, like cold, or indirectly like it, debilitates (*k*). Nay, the emptiness of the vessels, from want of food, or from the incapability of the digestive organs to take it in and assimilate it, as also that debility which is induced by melancholy and grief, though, *in these* cases, no matter at all is present, admit

(*g*) CCXIX.

(*h*) See above CXV. CXXII. CCXXXVI. and the addition I.

(*i*) Ibid. and CCLXI.

(*k*) See again CCXXXVI. and the addition at I.

of

of the ſame application (*l*). By means of that debility in the extreme veſſels, internally, as well as externally, and, thererefore, eſpecially in thoſe of the alimentary canal and in the perſpiratory veſſels, the fluids ſtagnate; and by ſtagnating under the heat of the body, degenerate into that foreign quality, which, in a more extenſive ſenſe, is called corruption, but in a more uncertain one, putrefaction (*m*).

DCLXXIV.

(*l*) Theſe words from "Nay" are an addition to the Elementa; the words, in the original, correſponding to them, being "Immo vaſorum ei cibis negatis, vel adſum "digerique non potibus, inanitas, item a triſtitia et mæ-"rore, ubi materia nulla ſubeſt, inducta debilitas, eodem "pertinent."

(*m*) There are three ſtates or qualities produced in fluids by as many different fermentations, the ſacharine, acid, or putrefactive. To one or other of thoſe we are apt to refer every ſtate of corruption in our fluids; but they are liable to degeneracies, which do not exactly correſpond to any of thoſe: And, as we are not yet acquainted with any of thoſe deviations from the natural ſtate, it is ſafer to uſe the general term corruption. Even the word *acrimony* is too general, as we can by no means pretend to ſay, that perfect blandneſs is the natural and healthy ſtate of our fluids: Nay, the different uſes and ſubſerviency to the functions ſeem to require a conſiderable deviation from blandneſs; the urine, the perſpirable fluid, the bile, and others, being intended, by a certain poignancy,

DCLXXIV. As the caufe of all thefe difeafes is the fame with that of difeafes not febrile, to wit, debility; differing only in this, that it is the greateft debility compatible with life, and not long compatible with it; fo

DCLXXV. The indication alfo of cure is the fame as that of the other afthenię, but muft be conducted with a good deal of more attention than is *neceffary* in them, upon account of their much greater mildnefs (*n*). It is, then, debility alone, that is to be regarded in the cure; and ftimulant or antifthenic remedies alone, that are to be adminiftered. Nor is there occafion for any diftinction in the method of cure, but what direct or indirect debility requires (*o*).

poignancy, to anfwer certain purpofes. Thefe, compared to certain blander fluids, may be faid to be acrid; while compared to their ftate in morbid degeneracy, they may be called bland, and the latter acrid.

(*n*) Fevers will require many more vifits from the phyfician than are commonly either beftowed or required, and often a good deal of watching. While this is more generally the cafe in fevers, at leaft in the high degree in which thefe fevers exift, at the fame time they are not the only ones that require fuch ftrict attention; as every difeafe, when it has attained to the fame degree of debility, endangering life, will claim the fame circumfpection and vigilance from the judicious and confcientious phyfician.

(*o*) See par. CIII. CVII.

DCLXXVI. The indirectly debilitating powers, are the violent and local ſtimulus of the eruption in the confluent ſmall-pox (*p*), ſo often inducing proſtration of ſtrength, and drunkenneſs (*q*), heat (*r*), or long continued luxury (*s*). To theſe hurtful powers, thus indirectly dibilating, all, the others may more or leſs be added (*t*).

DCLXXVII. And as it never happens, that either direct or indirect debility alone proves hurtful, *hence we have* a third caſe given, where we have to combat *both ſorts of debility* (*u*).

DCLXXVIII.

(*p*) See CLXXV. CCXV. CCXVI. CCXVII. CCXVIII.

(*q*) CXXX. and addition.

(*r*) See CXV.

(*s*) See above par. CXXVII. and addition.

(*t*) Look for them in Part I. Chap. I.

(*u*) Suppoſe any direct debility has occaſioned a diſeaſe, when that is eſtabliſhed, the excitability is ſo morbidly accumulated, that the ſlighteſt exertion of any exciting power becomes too much for it; which immediately conſtitutes an admixture of indirect debility. The ſtimulus of corporeal motion, which is a great and rough indirectly debilitating power, is often too long continued, after a typhus fever has begun its inſidious attack upon the habit; and hence the after-part of the diſeaſe becomes more ſevere

were

DCLXXVIII. The directly debilitating powers are known, to wit, cold (*x*), low diet,

(*x*) See par. CXVII.

vere and dangerous. It is alſo to the ſame cauſe that we owe the propriety of excluding light and ſound, when they prove cauſes of irritation, their ſtimulus, though ſlight, being too ſtrong for the accumulated excitability. The guarding againſt guſts of paſſion and emotion, as well as mental exertion, is all upon the ſame principle. When a perſon falls into a fever from exceſſive labour and low diet at the ſame time, that is an inſtance of a mixture of debility from the beginning. Again, when any diſeaſe, chiefly of indirect debility, is treated by bleeding, other evacuations and ſtarving, that is an inſtance of a ſuperinducement of direct upon indirect debility. A judicious practitioner, and who preſcribes according to the rules that ariſe from a near acquaintance with the operations of the inanimate part of matter upon living ſyſtems, will find plenty of ſcope for the exerciſe of his judgment in theſe and many other niceties: And he will find, that the Brunonian doctrine, as it is now nick-named by thoſe who know it not, is not a doctrine to be practiſed without knowledge, with judgment, and without ſenſe; but that it requires every part of knowledge requiſite to throw light upon ſo extenſive a ſubject, as that of the ſcience of life over all nature, and all the judgment and good ſenſe of the ſoundeſt underſtanding to carry it into application upon many occaſions of nicety and difficulty. The traſh that has hitherto too often paſſed for knowledge, is to be acknowledged not only uſeleſs, but hurtful. But the true knowledge of nature muſt be always elegant, always ſatisfactory,

diet (*y*), bleeding, and other evacuations (*z*), reſt of body and mind, and want of paſſion and emotion (*a*), and impure air (*b*).

DCLXXIX. As both thoſe ſets of powers act by debilitating; be, at the ſame time, on your guard from believing, that ſome of them are ſeptic, and prove hurtful by fermentation, and are to be cured by antiſeptics, or powers that reſiſt putrefaction; and that, among the former, heat is to be reckoned; among the latter, cold, wine, the Peruvian bark, and acids (*c*).

DCLXXX. In the gentle caſes, as in the agues of cold places, and eſpecially the vernal

tisfactory, always uſeful. It is to be hoped the day is not far diſtant, when this doctrine will change its preſent appellation, into that of the doctrine of Nature, over the living part of her productions; comprehending not only the morbid but healthy phœnomena, and the diſtinctions between the living and dead ſtate.

(*y*) CXXVIII.

(*z*) CXXXIV. CXXXVII. and the addition.

(*a*) CXXXVII. and addition, and CXXXIX. and CXLII.

(*b*) CXLVI. Compare the whole with Part II. Chap. X. all from CCXC. to CCCXII. and from that to par. CCCXV.

(*c*) See par. DCLXXIII. and the addition.

agues (*d*), and likewiſe in ſynochus, in the ſimple typhus, and in the plague itſelf, when mild; ſcarce any ſtronger ſtimulus than wine is required; and the reſt of the cure is to be conducted according to the directions ſo often now laid down in the mild aſthenic diſeaſes.

DCLXXXI. In the moſt ſevere fevers, ſuch as the remittent (*e*), in the warmer regions of the earth, and in the torrid zone, and in the ſevere typhus, when it is peſtilential, in the very violent dyſentery and cholera of the ſame places, and in the moſt violent plague itſelf (*e*), the cauſe of all which affections is in general direct debility; or in gentler caſes of the ſame diſeaſe at firſt, and that have now acquired a great deal of virulence in their progreſs from the neglect of the proper, or the uſe of an improper plan of cure; we ought immediately to begin with the higheſt diffuſible ſtimuli, ſuch as opium, volatile alkali, muſk, and æther, in ſmall doſes but often repeated (*f*); and afterwards, when the ſtrength is reſtored, and the force of the ſtomach confirmed by

(*d*) See DCL. DCLIV. DCLX.
(*e*) DCL. DCLX. DCLXIV. DCLXV.
(*f*) XLI. XLIII. CXIII. DCLX. to DCLXIV.

their

their uſe, to proceed to *the uſe of* food, drink, geſtation, pure air, cheerfulneſs, and, laſt of all, to the uſual offices *and occupations* of life.

DCLXXXII. When indirect debility has had more concern in the cure, as in agues, or more continued fevers, occaſioned by drunkenneſs, and in the confluent ſmall pox; the ſame remedies are to be employed, but in an inverted proportion *of doſe*. We ſhould, conſequently, ſet out here in the cure with the largeſt doſes, and which, are next in quantity to that degree of ſtimulus, which produced the diſeaſe (*g*); then recourſe ſhould be

(*g*) This may be exemplified by the treatment of a perſon the next and ſecond day after he has been hurt by drinking. His excitability has been worn out by an unuſually ſtrong ſtimulus, the effect of the firſt night's ſleep is to allow it to accumulate again: In this ſtate much exerciſe fatigues, for want of excitement to enable it to be born: Fluid nouriſhment is commonly uſed, but it is not ſtrong enough to waſte the redundance of excitability, and bring the patient back to his healthy excitement. The dram drinkers know the remedy, but they know not its bounds. They have recourſe to a glaſs of ſtrong ſpirit, and they would be right if they ſtopt at one, two, or a very few, according to the quantity, that their former habit may render neceſſary, and take

be had to leſſer ſtimuli, and a greater number of them, till, as was ſaid juſt now (*h*), the ſtrength can be ſupported by the accuſtomary and natural ſtimuli (*i*).

take no more than what gave them an appetite for ſolid nouriſhing animal food; which, whatever the quantity that is required to produce it be, is the beſt general rule: But they go on, and every day till that of their death, which ſoon arrives, renew the diſeaſe. The rule is to take a little of what proved hurtful, till a return of appetite comes on: After eating a little, a walk or a ride will add more ſtimulus: The air, in which the exerciſe or geſtation is performed, will furniſh another. In that way, more ſtrength will be acquired in proportion as a greater number of ſtimuli have waſted more excitability, and with more equality. A ſecond day's management by applying the ſtimuli in ſtill a leſſer degree, will commonly remove all the complaints. When an habit of hard drinking has brought on, as it always will ſooner or later, a very bad and confirmed diſeaſe; if the excitability is nearly worn out, and what remains is very unequal, as having been produced chiefly by an alternation betwixt one ſtimulus acting with partial exceſs and ſleep, either imperfectly removing the exceſs, or by its length ſuperadding direct to the indirect debility, which the drink occaſions; the patient ſhould have ſomewhat a leſſer quantity, than that which at any time hurts him; then the next day ſtill leſs; and ſo on, till very little will ſerve him, and he ſhould add all the other ſtimuli in proportion as he diminiſhes the morbid one.

(*h*) DCLXXXI.

(*i*) CCCVIII. to CCCXII.

DCLXXXIII.

DCLXXXIII. To give ſome eſtimate of the doſe in both caſes (*k*); in direct debility, where the redundancy of excitability does not, for the time, admit of much ſtimulus (*l*), ten,

(*k*) DCLXXXI and DCLXXXII.

(*l*) The abundant excitability of an infant cannot be reduced at once to that waſted degree, in which the ſtrength of an adult conſiſts; it muſt be by the gradual application, of what it can bear always for the preſent time that that can be brought about; and, therefore, not ſooner than a ſpace of time, equal to half the individual's given period of exiſtence. In a ſimilar manner, an excitability that has been accumulated from deficiency of ſtimuli for a number of weeks or months, will require a ſpace of time, ſomewhat proportioned to that, to wear it out in the manner moſt ſuitable, to reſtore the loſt vigour. Some health will be ſooner brought about, but the effectuating of perfect health muſt be a work of time. Again, the direct debility of a few days will be eaſily removed in a few days. In fevers, and every caſe of high debility, the accumulation of excitability for want of ſtimulant power to produce excitement, muſt be eſtimated by the number of ſtimuli that have been withheld, as well as the degree of force of each of them. In a fever, then, the ſtimulus of exerciſe, of the open air, of converſation, of diverſion of every kind, of an agreeable flow of ſpirits, of a pleaſant train of thinking, of light and ſound in a great meaſure, as well as of the exerciſe of all the other ſenſes, and particularly the ſtimulus of a due quantity of blood, and other fluids, and moſt eſpecially

ten, or twelve drops of laudanum given every quarter of an hour, till the patient, if,

especially that of nourishing food, and, at least upon the common plan of practice, that of wine and exhilarating drink, all these, are withheld, and, therefore, for want of them, the diminution of excitement must both be great and unequal. What then is required as to the idea of the cure? Since most of those, which are the ordinary stimuli, by which the ordinary health is supported, cannot be applied; the proper idea is to look out for a power in nature, that can, as nearly as possible, supply, both the degree and equality of stimulant operation that is wanted. Such a power we find in the few diffusible stimuli, and particularly in opium (See par. CXXX. and the additions). Any of those act powerfully on the stomach, and diffuse proportional excitement over the system. Soo soon and effectually do they pervade it, and act with the most powerful effect upon the surface, that it is often an object of attention in the practice to think of means to prevent it from going too far. By the blessed use of those remedies, the excitement of the stomach is restored, so that with a return of appetite, food can be taken in, and digested, in so far as the powers of that organ go; which are confined chiefly to the first part of digestion, or what is called the first concoction. Next the excitement is restored in the other digestive organs, in the duodenum, in the biliary vessels, the pancreatic duct, in the lacteal vessels, throw their whole course from the intestines to their common receptacle, as all the vessels that return lymph from every part of the body, in the veins betwixt the thoracic duct and the heart, in all the cavities of the latter, in all

if, as is usually the case, in such a high degree of debility, he has wanted sleep long (*m*), falls

all the red arteries, in the colourless terminations of all these, whether exhalant or glandular, and whether only simply separating, or also changing, the property of the fluid they secrete, in all the internal cavities of the body, in the commencing extremities of the absorbent vessels, and in their progress throw their lymphatic trunks to the receptacle in common to them with the lacteals, which are a part of their number, in the thoracic duct again; as also from that to the heart, and from the heart to the extremities of the arteries: Lastly, the influence of excitement is extended to these terminations of the arterial system, whether exhalant or glandular, which perform the several functions of excrementitious secretion and excretion, by which every portion of fluids, now become useless, or, if they were retained, hurtful to the system, are thrown out by their several emunctories. When, by the use of the diffusible stimuli, the stomach, and all the organs can perform their respective functions, the natural stimuli begin to be restored; the stomach, the intestines, the lacteals and blood vessels, and all the other vessels, are gradually filled with their respective fluids; the muscles on the surface, and the muscular fibres recover their tone and density; the brain recovers its vigour; heat and air can be now restored to the surface; exercise can now add its useful stimulus; and all the functions return to their usual capability of being acted upon by the usual and ordinary exciting powers.

(*m*) Want of sleep is an indirectly debilitating power; and, in this weakened state of the system, in this redundancy

falls into it: After ſleep, when now ſome vigour is acquired both by that and the medicine, and now ſome of the exceſſive excitability is worn off, a double quantity of the diffuſible ſtimulus ſhould be added, and, in that way, gradually encreaſed, till the healthy ſtate can now be ſupported by ſtimuli leſſer in degree, greater in number, and more natural (*n*).

DCLXXXIV. In indirect debility an hundred and fifty drops ſhould forthwith be thrown in; and then the ſuperaddition *to be made*, ſhould be leſs and leſs, till *we arrive at* the boundary juſt now mentioned (*o*). Both the meaſures are recommended (*p*), are in general applicable to adults; but leſs will ſuffice at an early or late age. Nay, the rule further varies according to the habit, the way of life,

dundancy of excitability, where every exciting power is liable to be too much for the excitability, the want of ſleep, by not allowing this partial waſte of excitability to be repaired, is the occaſion of ſo much more indirect debility being added to the direct; and hence the ſum total of debility is encreaſed. The effect of ſleep in removing this partial indirect debility becomes ſo far an invigorating power.

(*n*) See above par. CIII. and CVII.

(*o*) DCLXXXIII.

(*p*) in par. DCLXXXIII. and this.

the

the nature of the place, and the peculiarities of the patient (*q*.)

DCLXXXV. And ſince the uſe of the diffuſible ſtimuli only ſucceeds, when life cannot be preſerved by the uſual and more congruous to nature, and a due quantity of blood and other ſtimuli ſoon become ſufficient to finiſh the healthy ſtate; we ſhould, on that account, even from the beginning im-

(*q*) When the habit is delicate, the patient's way of life moderate as to the uſe of the ſtimuli, the place cold, or both cold and moiſt, and the patient eaſily affected with ſtimuli of all kinds; in all theſe caſes the rule, which common ſenſe preſcribes, is to diminiſh the doſe of the diffuſible. A lady in Edinburgh, who had born and nurſed many children, had lived exceedingly moderately, had been and ſtill was very aſſiduous in the management of her family affairs, and uſually ſtimulated with little air out of her own houſe, fell into a cholic, and, by the evacuant and ſtarving plan, had been kept in it for a full month, till the urgent ſymptom of vomiting required further aſſiſtance: When I came, I firſt retarded the vomiting by a glaſs of whiſky: And, by two more, with no other help but that of a mixture containing 30 drops of the Thebaic tincture, which the ſurgeon had been adminiſtering in miſerable ſmall portions, in three hours removed the whole diſeaſe. As I have ſaid ſomewhere before, the diſeaſe, from her neglect in fulfilling directions, had very nigh returned next day; but another glaſs repelled it.

mediately give animal food, if not in a ſolid form, in which it can neither be taken nor digeſted, at leaſt in a fluid form, in that of ſoups; which ſhould be alternated with all the doſes of the diffuſible ſtimulus: Then, in a gradual way, proportioned to the return of vigour, firſt a very little of ſomething ſolid, and afterwards more and more, ſhould be thrown in, and the other ſtimuli, each at its proper time, brought into play; till the whole cure terminate in the management commonly obſerved in good health, where there is leſs occaſion for medical injunctions.

DCLXXXVI. When the affection is more a mixture of both ſorts of debility, theſe proportions of the doſes muſt be blended together.

DCLXXXVII. Contagion, which either adds nothing to the effect of the uſual hurtful powers, or proves hurtful by the ſame operation *by which they are ſo*, is not otherwiſe to be regarded, than that time be allowed for its paſſing out by the pores, together with the perſpiratory fluid, and, therefore the perſpiration be properly ſupported; which, as it is affected

effected by ſtimulating, is no addition to the *general* indication (*r*).

DCLXXXVIII. Laſtly, the coruption of the fluids in the extreme veſſels muſt be obviated (*s*), not by means, that by a direct operation remove it, but by the powers that act upon the excitement of the ſolids, and that encreaſe excitement over the whole body, and, therefore, *among other parts*, upon the labouring veſſels.

DCLXXXIX. Having now run over the whole ſcale of decreaſing exciting power from peripneumony to the plague, and from death by indirect, to death by direct debility; *and having ſo executed the work, as to preſent the public* with a new ſcience, if not finiſhed off in an elaborate, elegant, and highly poliſhed manner, at leaſt marked in outlines, and, like a rough ſtatue, to be poliſhed afterwards, in ſome meaſure faſhioned in all its limbs, and embracing an entire plan of a work, connected in all its parts; we muſt next paſs over to the conſideration of local diſeaſes.

(*r*) See LXXXVIII. XCVIII.

(*s*) CCXXXVI. addition at I. and CCLXXIV.

THE FIFTH AND LAST PART.

LOCAL DISEASES.

CHAP. I.

Of Local Diseases.

DCXC. LOCAL diseases (*a*) are divided, according to an order of nature, into five parts; the first of which consists of organic affections, where no disease over the whole system arises, none but in the hurt part. This is a sort of affection, that happens in parts less sensible, according to common language, or more devoid of excitability.

(*a*) V. VI. VII.

DCXCI.

DCXCI. The ſecond part, likewiſe made up of organic affections, occurs in parts *of the ſyſtem*, whether internal, or external, that are very ſenſible, endued with a great deal of excitability (*b*); where the effect of the local affection is propagated over the whole body, over the whole nervous ſyſtem, and where a very great many ſymptoms ariſe, ſimilar to thoſe which are peculiar to univerſal diſeaſes.

DCXCII. The third part of local diſeaſes, *takes place* when a ſymptom of general diſeaſe, that at firſt aroſe from encreaſed or diminiſhed excitement (*c*), arrives at that height

(*b*) The excitability is here not talked of in its comparative ſtates of abundance or deficiency, but in the degree in which any part poſſeſſes it in preference to other parts. It is uſed in the ſenſe of the greater or leſſer vitality of parts: Accordingly we can ſay, that ſome parts poſſeſs an exquiſite ſenſibility, as the ſtomach, the brain, and inteſtines, and, I believe, moſt of the interior, ſoft, fleſhy parts, and the ſhut cavities; and externally, the parts immediately under the nails; that others poſſeſs leſs, as the bones, ligaments, and cartilages and ligaments; and externally, the cuticle, or ſcarf-ſkin. It is, with reſpect to the difference of ſenſibility, or excitability, or capability, to be acted upon by exciting powers, that we uſe the expreſſion of more or leſs excitability. See above par. XLIX. and the addition, and LIII. and addition.

(*c*) like all the other ſymptoms, of which it was one, of

of degree, at which, being no longer under the influence of excitement, it cannot be affected by remedies that correct the excitement.

DCXCIII. The fourth part, *or division* of local diseases, consists of those, in which a contagion, externally applied to the body, is diffused over all, without affecting the excitement (*d*).

DCXCIV. The fifth part of *local diseases*, arises from poisons *that have been* applied to the body, and flow through all the vessels in such a manner, that they are understood not immediately, nor at first, to have any tendency either to encrease or diminish the excitement, but falling upon parts, some on one, some on another, hurt the texture of these in different manners; and, after occasioning that *local* hurt, by means of it produce disturbance over the rest of the body.

(*d*) If it affected the excitement its effect would be general disease, which sometimes happens, as in the small-pox, measles, contagious typhus, and the plague.

CHAP.

CHAP. II.

The first Part of Organic Local Diseases, where no Effect, but in the hurt Part, arises.

DCXCV. WITH regard to the first part of local, organic diseases; the hurting powers, that produce them, are such as produce a solution of the continuity of a part, by wounding, eroding, or poisoning; or that derange a part by contusion, compression, or spraining.

DCXCVI. The hurting powers, producing solution of continuity, are all cutting, pricking, or missive, weapons: Acrid bodies and poisons produce solution of continuity in another manner.

DCXCVII. When any of these hurting powers slightly divide the surface, and scarcely, or not at all, get to the bottom of the skin; for the cure of so trifling an affection, there is occasion for nothing but shutting out the air, and cold, and excessive heat, and avoiding every irrating substance. For the only use of the cuticle is, by means of its insensibility,

bility (*a*), (it being a ſimple (*b*) ſolid, and devoid of all excitability), to keep off the air, and all exceſs of temperature, and every rough or rude matter, which are all inimical to living ſolids (*c*), whether external or internal.

DCXCVIII. When the ſurface, therefore, is hurt in its texture, either by being cut, or bit, or ſtung by venemous animals, or by being burned, or by a very high degree of cold; in that caſe a thin, mild, oily plaiſter is ſufficient for the cure.

DCXCIX. The diviſion, therefore, of phlegmaſiæ, into phlegmone, or erythema, is without foundation, and miſleading, both as to the cauſe, and as to the cure, from the

(*a*) See DCXCI. and the note.

(*b*) not a living.

(*c*) So hurtful is the air and temperature to all parts below the cuticle, that nothing is a more certain cauſe of gangrene than their expoſure, even for a very ſhort ſpace of time: Nor is there any other way of accounting for the fatal effect of ſlight, ſuperficial, but extenſive burning. Death has been the conſequence of a burn, that extended no further than the fore-part of the thorax, or the breaſt, and was not of longer continuance, than the time taken to tear off the burning clothes that occaſioned it.

knowledge

knowledge of the truth (*d*): For, however much they differ in their remote caufe, as they call it, and in their feat, and in their appearance; fince the exclufion of the air and of other ftimuli is their effectual cure; it, confequently, follows, that their caufe is the fame, that is, that the nature of all thefe affections is the fame.

DCC. In *the cure of* contufion, compreffion, and fprains (*e*), the fame, in general are the remedies; and befides them, there is occafion for reft *of body*, and bland tepid fomentations.

DCCI. Through this whole divifion of local affections, there is a certain energy of nature, that tends to the reftoration of the healthy ftate; but it is not the celebrated vis medicatrix naturæ of phyficians: For in this

(*d*) See the feventh Genus in Genera Morborum Culleni, where you will find Linnæus's prototype of inflammation, that is, of inflammatory difeafes, or what is in this work called phlegmafiæ, or fthenic difeafes with inflammation or an approach to it, alfo adopted by this author. It is nothing elfe but a collection of local affections, or, in a few cafes, fymptoms of difeafe, and that they almoft all come under this head of local difeafes, and every one of them under one of thefe heads.

(*e*) See par. DCXCV.

cafe

caſe nothing elſe happens, but what *equally happens* in the cure of general diſeaſes. If proper remedies are applied, the ſound ſtate in both ſorts of diſeaſes follows: If the remedies be neglected, the ſolution of continuity degenerates into a worſe and worſe nature, and then into gangrene, or the death of the part *(f)*. It is the excitability, or that property of life, by which the functions are produced (*g*),

(*f*) Of this we are preſented with examples in every day's experience; where we find the ſlighteſt ſores, from the neglect of the ſimple rule of cure laid down here, degenerate into very troubleſome affections.

(*g*) See above par. X. to XIV. If I cure a peripneumony by bleeding, other evacuations, and other debilitating powers, that are not evacuant, it is by diminiſhing the force of exciting power; if I cure a fever by opiates and other ſtimulant powers, whether ſtimulating by filling the veſſels, or without that, it is by encreaſing the ſame force; and if I cure a ſore on the ſurface, by the method juſt now mentioned, I thereby prevent the force of exciting power from riſing too high, from an exceſs of ſtimuli, or from running either into direct or indirect debility, from too little ſtimulus, or an ultimate exceſs. If either theſe general or local cures are neglected, or miſmanaged, the cure will not be ſupplied by any effort of the ſyſtem; and if the cure is made out by regulating the excitement, ſuch effort is ſuperfluous. The vis medicatrix then is as little real in local as general diſeaſes. See above par. LXII. and the addition. The reſt of this paragraph in the Latin is eraſed.

that,

that, wherever life, whether in a part, or over the whole body, is hurt, procures *the return of* the healthy ſtate by means of the external powers acting upon it. *It is*, then, the excitability, affected by *the action of* thoſe powers, that is to ſay, the excitement, *that* governs the ſtate of the ſolids, both in parts, and over the whole body (*g*).

CHAP.

CHAP. III.

The second Division of Local Diseases.

DCCII. THE local organic diſeaſes of the ſecond diviſion are the inflammation of the ſtomach (*a*), and that in the inteſtines (*b*); as alſo bleeding diſcharge, with an inflammation ſubſequent to it; and, in fine, an inflammation in any very ſenſible part, in conſequence of a wound, producing commotion over the whole body.

Of the Inflammation in the Stomach.

DCCIII. The principal ſymptoms in gaſtritis are, pain in the region of the ſtomach, a burning heat, deep ſeated, encreaſed by every thing that is either ate or drank, or in any ſhape taken into the ſtomach; hiccup, an inclination to vomiting, and the ſudden throwing up what is taken in; and the pulſe ſoon getting into a ſtate of debility, quickneſs, ſwiftneſs, and hardiſhneſs.

DCCIV. The exciting hurtful powers, and which produce the ſolution of continuity *in*

(*a*) or gaſtritis.

(*b*) or enteritis.

this case, are ſuch as act by cutting, pricking or eroſion. Such are the ſmall bones of fiſhes, ground glaſs, or Cayan pepper and ſuch like things.

DCCV. Inflammation is a conſequence of the wound or eroſion, that are the effect of the operation of thoſe *exciting powers*: The effect of which, in the very ſenſible organ of the ſtomach, is to diffuſe the diſturbance before-mentioned (*c*) over the whole ſyſtem. The burning heat and pain, inſeparable from every inflammation, and the anxiety (*d*), are the offspring of the inflammation (*e*): And, of them, the anxiety is more peculiar to the ſtomach, the latter being its accuſtomary ſeat (*f*), and the pulſe becomes ſuch as has been related, becauſe it is peculiar to every rude, fixed, and permanent *local* ſtimulus (*g*); to weaken, and *to be* ſo much the *more liable to that effect*, the greater the excitability *of the part* is. Hence, in the external parts of the body, that are leſs endued with excitability, a pretty con-

(*c*) DCXCI.
(*d*) CLXXI. CCCXLV.
(*e*) CLXXI.
(*f*) CCCXLV.
(*g*) XVII. and the addition.

fiderable inflammation by no means affects the pulfe or the body any way generally; though even there, when a part is fenfible, as in the cafe of a burn fpread to any extent, or of a thorn having been thurft below the nails, an equal difturbance arifes over the whole body (*h*), which confirms a former propofition, *in which it is afferted*, that the more abundant the excitability is (*i*), the lefs ftimulus can be borne (*k*).

DCCVI. The difeafe is eafily known, both from the fymptoms *above* defcribed, and, with not a little more certainty, from the known taking in of the hurtful powers; and, over and above, by this particular fign, that, as it has been faid before, without fuch marks, inflammation fcarce feizes upon an internal and fhut part (*l*).

DCCVII.

(*h*) CCCXLIV. CCCXLV.

(*i*) XXXVI.

(*k*) The reft of this fentence is erafed, in the original, as being nonfenfe.

(*l*) CXIII. and CLXVIII. The ftomach is fometimes inflamed from a fchirrous tumor occupying the pylorus; and that cafe alfo is taken in by the fyftematic and nofological writers, as belonging to their gaftritis: But the confideration of it does not belong to this head of loca

DCCVII. As this is a local diſeaſe, and does not, like the general ones, depend upon the encreaſe or diminution of excitement; conſequently, the indication ſuited to the latter, to wit, to diminiſh encreaſed, or encreaſe diminiſhed, excitement, over all, will not apply. On the contrary, unleſs a general diſeaſe happen to be combined with it, nothing elſe is to be done, but, by throwing in bland, demulcent liquors, to defend the tender part from the rude contact *of the ſtomach's contents*, and give the inflammation time to finiſh its courſe; and, if the phyſician is called ſoon enough, to waſh off the hurtful matter with a diluent drink.

Of the Inflammation in the Inteſtines:

DCCVIII. The inflammation in the inteſtines is a local affection; in which there is an acute pain in the belly, and diſtention, and

local diſeaſes, but to the third diviſion of them. At the ſame time, both it and the preſent caſe are local diſeaſes, and not phlegmaſiæ, differing from the phlegmaſiæ, ſo fully treated of in the third part of this work. It, as well as enteritis, of which we are next to ſpeak, have every mark of difference from the general diſeaſes mentioned in the VIth paragraph. See alſo Chap. I. of the fifth Part.

ſometimes a ſort of twiſting of the pain around the navel, with vomiting, and an obſtinate coſtiveneſs, and ſuch a pulſe as in the inflammation of the inteſtines.

DCCIX. The hurtful powers, exciting this diſeaſe, are preciſely the ſame, as thoſe that have been ſaid to excite the inflammation of the ſtomach, that is:

DCCX. The inflammation ariſes in a ſimilar manner, as in the inflammation of the ſtomach, and the more readily, that the inteſtines are more ſenſible than the ſtomach (*m*). And hence alſo, in a ſimilar manner, is a ſtate of diſturbance diffuſed over the whole body.

DCCXI. The acute pain of the belly depends upon the inflammation: Its diſtention and the coſtiveneſs is the offspring of the detained fœces. The ſame is the cauſe of vomiting; for the periſtaltic motion being prevented, upon account of the obſtruction, to proceed downward in its uſual way, from its reſtleſs nature recoils in the direction upward; as affecting neither direction, unleſs in ſo far

(*m*) Baron de Haller, from ſome experiments that he made, found the inteſtines more ſenſible than moſt parts of the body, more than the ſtomach, and equal in ſenſibility to the brain.

as the ſtimulus, by the impulſe of which it is regulated, either commences from above, as health requires, or from below, as happens in other diſeaſes, and in this in particular (*n*). The pain twiſting about the navel, is produced by the inflammation, for this reaſon, that the principal, and by far the greateſt part of the inteſtines, is thrown in a convoluted ſtate about the navel.

DCCXII. The diagnoſis is the ſame as in the gaſtritis; excepting, that the ſeeds of fruits, hairs, and ſimilar foreign bodies, ſometimes upon account of the torpor of the periſtaltic motion, adhering to the ſides of the inteſtinal canal, gradually, by their irritation, kindle up an inflammation: Which is a fact, that if examined attentively, and once rightly conſidered, will not diſturb our diagnoſis.

DCCXIII. The cure is preciſely the ſame as in the inflammation of the ſtomach.

DCCXIV. All the reſt of the pretended phlegmaſiæ, diſtinguiſhed by the appellation of "*itides*," as the ſplenitis (*o*), hepatitis (*p*),

(*n*) See par. CLXXXVIII. CLXXXIX.

(*o*) or inflammation of the ſpleen

(*p*) or the inflammation of the liver

 the

the true nephritis (*q*), the cyſtidis (*r*) without a ſtone, or the hyſteritis, not ariſing from ſchirrus (*s*), and the peritonitis (*t*), do not belong to this place; as, beſides the doubt of their ever being inflamed, not ariſing from ſtimulants and acids, neither of which have acceſs to the ſhut viſcera (for theſe ſubſtances are not carried in the veſſels, or can be carried), but from the relicks of other diſeaſes, of which we are to ſpeak afterwards, with the following exception:

DCCXV. The exception is, that if any one falls from a height, if he is run through any part of his bowels with a ſword, if a poiſoned arrow, thrown by any ſavage, has pierced any of his inward parts, he will, in

DCCVI. The caſe of the inflammation affecting the liver, be affected with a pain in his right hypochondrium, with vomiting and hiccup: If

DCCXVII. The inflammation affect his ſpleen, the pain will be in his left hypochondrium; in

(*q*) or inflammation of the kidnies.
(*r*) or inflammation of the bladder of urine.
(*s*) or inflammation of the womb.
(*t*) or inflammation of the peritonaeum.

DCXVIII.

DCXVIII. The caſe of the true nephritis, or inflammation of one of the kidnies, he will be pained in the region of the kidney, and ſeized with vomiting, and a ſtupor of his leg; in

DCCXIX. The caſe of the inflammation happening in his bladder, he will have a tumour and pain in the under belly.

DCCXX. Bleeding diſcharge, followed by inflammation (*u*), ſuch as happens in the inflammation of the womb, or of any neighbouring part, and in abortion, and in the wound of any internal part, is eaſily diſtinguiſhed by the pain of the affected part, and by the preceding accident.

DCCXXI. In the inflammation of the womb, or any neighbouring part, the lower belly is affected with heat, tenſion, tumour, pain, and *theſe ſymptoms accompanied with* vomiting (*x*).

(*u*) DCCII.

(*x*) The inflammation is frequently not in the womb, but in a neighbouring portion of the inteſtines, or meſocolon, or in the peritoneum itſelf, as diſſection has frequently ſhown. This is a diſeaſe, than which none has been more enquired into, and none yet leſs underſtood.

DCCXXII. The hurtful powers, that excite the hyſteritis, or inflammation of the womb and parts in its neighbourhood, all amount to violence done to the womb. Thus uſing violence during the labour, hurrying the birth, often produce a ſolution of continuity, and wound the womb with a tearing *rudeneſs*.

DCCXXIII. And, ſince a great deal of blood is often loſt in that way, and the local affection followed by debility of the whole ſyſtem *(y)*; for that reaſon bleeding, according to the common practice, any mode of evacuation, are not to be practiſed, nor is the patient to be forbid to eat; but, in the firſt place, regard is to be had to the affected part, the body muſt be laid in an horizontal poſture, ſhe muſt be kept from motion, and be allowed rich ſoups and wine: By and by more ſolid animal food ſhould be uſed morſel by morſel, but frequently repeated, and ſhe ſhould have her belly bathed: And, if the debility ſhould get a-head, recourſe muſt be had to more wine, drink ſtill ſtronger, and opiates: The

(*y*) Pain and loſs of blood are in one degree or another inevitable cauſes of debility.

uſe of which laſt ſhould not be neglected, even at firſt.

Of Abortion.

DCCXXIV. In abortion, the back, the loins, the belly, are pained, like what happens in child-labour; and there is either an unuſual flow of the menſes, or an extraordinary diſcharge from, the vagina.

DCCXXV. The hurtful powers, that force abortion, are falling from a height, ſlipping a foot, a raſh ſtep, intenſe walking, running, going up and down hill. This diſeaſe ſeldom, however, happens but to perſons previouſly weak; and the moſt powerful agent in bringing it on, is ſome taint left ſince a former abortion, which encreaſes in proportion to the number of abortions. When the diſeaſe happens in conſequence of the local hurting powers, juſt now mentioned, in that caſe it is perfectly local: But when debility is blended with the effect of thoſe powers it is a caſe of combination of general with local affection (z).

DCCXXVI.

(z) All the words here, from "præceſſerint" in the original, are an addition. The words in the Latin are, "Qui,

DCCXXVI. The indication for preventing the diſeaſe is, to guard againſt all the hurting powers that induce the diſeaſe; to ride out, when the patient has any degree of ſtrength; but, *in caſe of any apprehenſion of danger from weakneſs*, to go in a carriage, which will be more ſafe; to be upon guard from the third month of pregnancy till the ſeventh is paſſed; to invigorate the ſyſtem, and keep up the patient's ſpirits, and intellectual amuſements.

DCCXXVII. The indication of cure is, to keep the body in a horizontal poſition, with the buttocks higher than the head; to be ſtudious to keep the patient eaſy in body and mind; to repair the loſs of blood with ſoups, to ſecure the veſſels, for the purpoſe of contracting their enlarged diameters, with wine and opiates, and, in that way, take off, at the ſame time, the atony and laxity, which are the principal cauſe of the diſcharge.

" Qui, cum, poſt locales offenſas, modo relatas, ſine im-
" becillitate accidit, tum prorſus localis eſt; commixta
" cum illis offenſis imbecillitate, cum locali malo com-
" mune intermiſcetur." Theſe are diſtinctions not oſtentatious, not frivolous, much leſs miſleading, but of indiſpenſible neceſſity to the underſtanding of the ſubject.

Of

Of difficult Child-Labour.

DCCXXVIII. In difficult child-labour, the moſt common cauſe of which by far is weakneſs, and which always produces weakneſs when it proves lingering; the laying-in woman ſhould be ſupported with wine, and when the labour proves more difficult, and is now like to be tedious, opium ſhould be adminiſtered.

DCCXXIX. When now ſome part of the uterus is hurt by the hurting powers that have been mentioned (*a*), and the child and placenta are now both delivered, the woman ſhould be kept in an horizontal poſture, as *was recommended* in abortion; ſhe ſhould be invigorated by ſoups, chicken, wine and the *ſtill* higher ſtimuli; every thing contrary ſhould be avoided; and the healing up of the wound waited for.

Of deep-ſeated Wounds.

DCCXXX. In deep-ſeated, *or gun-ſhot*, wounds, when the ball, if a ball occaſioned

(*a*) See par. DCCXXV.

the

the wound, is now extracted, or though it ſtill remains in *the body*, in a place not neceſſary to life; firſt of all the whole ſyſtem is very much irritated, heated, pained, chafed, and diſtreſſed with reſtleſſneſs and toſſing; the pulſe is ſtrong, full, and more frequent than in health. The cauſe of all thoſe ſymptoms is the commotion, which, as we have ſaid, the local ſtimulus, either of the ball or of the inflammation ſupervening upon the wound, by its conſtant irritation of a ſenſible part, gives to the whole ſyſtem.

DCCXXXI. Becauſe, in this caſe aſthenic diatheſis is commonly ſuppoſed to ariſe over the whole body, upon account of the irritation from the wound; the antiſthenic plan of cure is, therefore, always employed through the whole courſe of the diſeaſe; and the uſe of opium, which, *in this caſe* is conjoined with the antiſthenic, or ſtimulant remedies, is admitted only for the purpoſe of acting as a ſedative and duller of pain, is admitted: Conſequently, upon account of the fear of a fever being to ſupervene, though often a great quantity of blood is loſt by the wound; ſtill large bleeding is practiſed, the belly is purged, nouriſhment is withheld, abſtinence enjoined:

The

The moſt frequent conſequence of which treatment is death, and never a recovery, that is not owing to accident (*b*).

DCCXXXIII. But all this is a method of cure *conducted upon* an erroneous theory, which is proved by all the principles of this doctrine, and by the very unfortunate iſſue of that practice. In a perſon, who has loſt a great deal of blood, an over-proportion of blood can never be the cauſe of ſthenic diatheſis: Neither can any tolerable reaſon be aſſigned for the profuſe evacuation of the ſerous fluid, or for not *rather* ſupplying new fluids by the uſe of food. It is in vain to accuſe frequency of the pulſe, as a ſign of an exceſs in the quantity of blood, and of too much vigour, or of any irritation that wants an antiſthenic plan of cure: For, beſides its hardneſs, if the pulſe is not, at the ſame time, ſtrong and full; it has been now often above demonſtrated, that all its celerity depends upon debility and penury of blood (*c*). Finally, as the ſthenic diatheſis depends upon the general

(*b*) The words in the end of this paragraph are thus corrected, " Unde mors ſæpiſſime, ſalus, nis; caſes, " nunquam."

(*c*) See par. CLXXIX. to CLXXXI.

ſthenic

ſthenic hurtful powers, as the energy of pain, from local affection, and particularly inflammation, has no tendency to induce that diathefis, but *the contrary one of* debilitating (*d*); that is another reaſon for the ſuppoſition of the habit, either remaining ſuch as it was before the wound *was received* (*e*), or, which is more probable, of degenerating into the aſthenic diatheſis. Laſtly, the true explanation of the diſtinction betwixt irritation and ſthenic diatheſis is in confirmation of the ſame *concluſion*; the ſthenic diatheſis being that ſtate of the ſyſtem, which is produced by all the powers, the operation in common to which is ſtimulant, over the whole ſyſtem, and, by a fulneſs in the veſſels, producing the ſame effect, and to be removed by debilitating powers weakening alſo the whole ſyſtem, and by evacuant remedies acting by the ſame general operation; whereas, on the contrary, it is irration, or that ſtate, in which the whole body

(*d*) DCCV.

(*e*) Which can hardly happen if blood has been loſt, which muſt diminiſh the excitement, and in proportion to its degree.

is

s often, without any ſtimulus, debilitated (*f*); ınd often a local ſtimulus, ſuch as diſtention :xciting ſpaſm, or a concentrated acid, inducing convulſion, or the pain of a wound that producing the general commotion here (*g*), and :ffect enormous motions in a weakened ſyſtem.

(*f*) When the body is debilitated, the ordinary ſtimuli, that in its healthy ſtate invigorate it, and even a much leſs degree of ſtimulus, will produce the irregular motions, which are ſuppoſed owing to irritation; not that any thing irritating is applied, but that the exceſſive abundance, or defect of excitability, admits not, without ſuch effects, the degree of ſtimulus, which, applied to it in its healthy half-waſted ſtate, would produce healthy and vigorous motions. (See XXV. and XXVI. and the addition.) The tumors that are occaſioned by the turning of a door upon its hinge, the ſweat occaſioned by ſlight exertions in walking, are ſo many inſtances of that, and the irregularities of the pulſe are owing to the ſame cauſe. As the weakneſs upon which fevers depends encreaſes, ſo alſo do the ſuppoſed ſymptoms of irritation, ſuch as colliquative ſweats, colliquative diarrhœa, ſubſultus tendinum, &c. But they are all the effect of the general weakened ſtate being fluttered by very ſlight ſtimuli. At other times irritating powers, in the ſame weakened ſtate, do occur; ſuch as thoſe mentioned in the text.

(*g*) But even in that caſe, the real ſtate is debility, and the indication of cure is to remove it, as well as the irritating powers: Which, while they encreaſe it, are at the ſame time its offspring, and require ſtimulants to enable the ſyſtem to reſiſt effect. (DCLXXXVIII.)

But,

But, whether the debility be without ſtimu-lus, or excited by it, there is never occaſion for debilitating evacuant remedies, but always for moderately ſtimulant ones: And we have only to take care, that the ſthenic diatheſis be not produced by the method employed for the cure, and thereby a general diſeaſe, at leaſt, a prediſpoſition to general diſeaſe be ſuperadded to the local, which could not fail to aggravate the latter.

DCCXXXIII. As, therefore, the antiſthenic plan of cure is not to be practiſed, from an apprehenſion of a fever being about to come on, with a view to allay the diſturbance *ariſing* from it; which has the contrary tendency, that of inducing the fever, and of exciting the diſturbance *apprehended*; ſo, neither is the ſtimulant plan to be attempted, till the wound is healed, or the diſeaſe has arrived at an advanced ſtage, and a great deal of debility is now induced by the continuance of the pain, leaſt, *if that method ſhould be ſooner employed*, the blood ſhould be carried with more rapidity than the caſe would admit of, and with an encreaſed momentum, into the *ſtill* open terminations of the veſſels: For it is underſtood, that neither diatheſis takes place in

and that the only *affection* present tion over the system, depending affection; and that, consequently, no occasion for the remedies of either; excepting this single consideration, that, as the loss of blood, in proportion to its degree, has a tendency to produce more or less of asthenic diathesis; there will, therefore, in that proportion, be occasion for some sthenic remedies.

DCCXXXIV. During the first days of the disease, because the patient, *all at once*, does not any longer engage in gestation, exercise, and the other functions both of body and mind, and of passion or emotion, according to custom, and, of course, less nourishment and recruit is now required; therefore, there should be such an abatement in his allowance of the usual stimuli, as to accommodate what is used to the present condition of the system and the state of the wound just now described (*b*). Therefore, to prevent too great an impetus in the vessels, silence should be kept around the patient, he should not speak himself, he should lie quiet and without mo-

(*b*) See last paragraph.

tion, his posture should not be
to avoid the disagreeable feeling
continuance of it, and even then
done as warily as possible. He sho
his water lying, *and* in an urinal; he
rather use soups, than solid meat; his wound should be examined every day, for the sake of keeping it clean; its progress should be observed; it should be dressed with fresh, soft, and bland matter; and if even at this early period, any faintishness appears, a glass of wine should not be withheld.

DCCXXXV. After some days, *which may be* more, or fewer, according to the strength of the patient, when now the habit is rushing into debility, upon account of the greatness or long continuance of the pain; *in that case*, besides the soups formerly allowed, meat as rich and delicate as possible should be given; wine should be administered sparingly at a time, but often, and upon the whole in large quantity; and then, at last, recourse should be had to opium, which, in the common practice, is usually given from the beginning *of the disease*, and to the other diffusible stimuli; and the disease should be treated precisely in the same way as a typhus.

DCCXXXVI.

DCCXXXVI. When very tender external parts are violated by any rude matter, ſuch as *happens* in that caſe, where a thorn is puſhed below any of the nails, and an inflammation ſpreads from the affected part to a conſiderable extent, and then, upon account of the great ſenſibility of the part, the whole body is drawn into conſent; the injured part ſhould be fomented with warm water, and dreſſed with lint, and ſoft, and bland ointment: And as long as the diſturbance of the ſyſtem remains, the patient ſhould be kept quiet, and free from motion, and nothing more attempted.

CHAP. IV.

Of a Part of a General Diſeaſe, degenerating into a Local.

DCCXXXVII. TO ſet about the treatment of that diviſion of local, organic, diſeaſes; in which a part, *or ſymptom*, of general diſeaſe degenerates into a local one; we next proceed to

Suppuration.

DCCXXXVIII. Suppuration, with which we begin, is for the moſt part a conſequence of any general inflammation, whether ſthenic, or aſthenic, or that inflammation, which is a ſymptom of general diſeaſes, or it is a conſequence of local inflammation, whether ſthenic, or aſthenic, as a ſymptom of local affection. In it the pulſe is ſofter, fuller, and a little ſlower, than in ſthenic diſeaſe, when that precedes it; but a great deal ſlower, than in aſthenic diſeaſe, if it happen to ſupervene upon it, and it is accompanied with an undulatory, and, as it were, a pulſatory, motion

motion of the labouring part; theſe ſymptoms are commonly preceded by a ſhivering: If the affection is internal, the patient ſhould be kept quiet, and free from motion, and be ſtimulated; if it be external, the affected part ſhould, over and above, be fomented, dreſſed, and covered, and the pus, when ripe, let out.

Of Puſtle.

DCCXXXIX. A puſtle is a purulent veſicle, turgid, and at laſt of its own accord opening in conſequence of having become tender, and full of pus.

DCCXL. It follows the ſmall pox, ariſing from the contagion peculiar to that diſeaſe: In the ſmall pox the number of the puſtules is greater or leſs in proportion, as more or leſs ſthenic diatheſis, occaſioned by improper treatment, or a neglect of the proper, has preceded (*a*).

DCCXLI. The indication of cure for them is, firſt to remove ſthenic diatheſis, and then, if that has paſſed into the aſthenic,

(*a*) XXI. LXXVI. XCVI. XCVII. XCVIII.

to remove it, each by its reſpective remedies; and to beſprinkle the puſtles with a ſtrong ſpirit, or with laudanum, and in the former caſe to guard againſt cold, in the latter againſt heat, and to open the puſtles and foment them.

Of Anthrax.

DCCXLII. Anthrax is a glandular tumour under the ſkin, gangrenous in the top, and inflamed in its edges all round.

Of Bubo.

DCCXLIII. Bubo is a glandular tumour, eſpecially affecting the one or the other groin, and of a tendency to ſuppuration.

DCCXLIV. Theſe two affections, *the anthrax and bubo*, as well as carbuncle, are almoſt always combined with a general diſeaſe, to wit, ſometimes with typhus, much oftener with the plague. They depend upon a contagious matter, and, in ſo far as they do not ſufficiently yield to the general remedies, they muſt be treated with a very ſtrong ſpirit poured upon

upon them, and with laudanum, and opening them.

Of Gangrene.

DCCXLV. Gangrene is an imperfect inflammation of a part, not terminating in suppuration, discoloured, scarce painful, consisting of pustules of a bad matter, and at last inducing the death of the part.

DCCXLVI. The hurtful power, that precedes gangrene, is always inflammation, often ultimately violent in a sensible part, oftener languid, and occupying a part less sensible, less supported by the powers of life (*b*); it is sometimes a symptom of the phlegmasiæ, sometimes of fevers, sometimes of local phlegmone (*c*).

DCCXLVII. The method of cure, when the gangrene is seated in the alimentary canal, is to pour in spirit and laudanum; when the shut viscera are affected, to place some hope

(*b*) The inflammation, out of which gangrene arises, is always unsupported, and the gangrene always a state of either direct or indirect debility; the high excitement in the phlegmasiæ, and the low in fevers, causing that.

(*c*) CCCXLVII. DCL. to DCLXXXIX.

in

in the ſame and other ſtimuli, but *much* leſs. And, as the ſame remedies alſo ſuit gangrene, when it is external, conſequently liquid opium ſhould be rubbed in upon the dying part, ſpirit would be poured upon it, the parts already dead ſhould be cut out, the edge of the living part all round ſhould be ſtimulated, and an inflammation made in it.

Of Sphacelus.

DCCXLVIII. Sphacelus is a more perfect and more extended gangrene, with an extinction of ſenſe, motion, and heat; in which the part becomes ſoft, blackiſh, completely black, putrid, and at laſt thoroughly putrid to the very bones, thoroughly cadaverous, and ſhifts rapidly to the neighbouring parts, and quickly extinguiſhes life.

DCCXLIX. The remedies are in general the ſame as in gangrene, but they ſhould be ſtronger, and adminiſtered in greater quantity, and with greater nicety, and in leſs expectation of a cure. When any limb is greatly affected, it ſhould be immediately cut off, to prevent the ſound parts from being infected (*d*).

(*d*) An addition.

...ous Tumor and Ulcer.

DCCL. When a ſcrofulous tumor and ulcer has been of long ſtanding, has disfigured the parotid gland and neighbouring parts, and all the remedies, that have any effect in removing ſcrofula, have been employed; after that no more is to be done, but to keep the aling part clean, bath it often, and defend it from the injury of the air; unleſs that, as local debility alſo takes place here, ſpirit and laudanum, applied to the part, may be of ſervice.

Of Schirrous Tumor.

DCCLI. When the tumor, which, while it was moderate, was a part or ſymptom of the general diſeaſe, called ſchirrhus, has now attained a certain bulk; if it be external, or ſituated in the exterior or convex part of the liver, it ſhould be cut off, and the ſyſtem invigorated: If it be internal, nothing can be attempted, but to prevent its encreaſe by ſtimulant remedies, and in that way keep the patient as long alive as poſſible, and in as good

health as the prefent circu[illegible]
of.

DCCLII. The two heads o[illegible]
remain (*e*), are of fo obfcure and abftract a nature, that, if ever they are to be attempted, they muft be paffed over at prefent. The third head (*f*) is here only imperfectly fketched and fcarce begun: But, becaufe it both admits of a complete execution, and when fo executed, will make an important addition to the work; it fhall be prepared for the public perufal, as foon as I fhall be happy enough to find as much leifure and fcope for thinking as are requifite to refcue the fubject from its prefent intricacy, diforder, and obfcurity.

(*e*) DCXCIII. and DCXCIV.
(*f*) DCXCII. DCCXXXVII. to DCCLII.

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107.	7.	effects	affects
109.	22.	indirect	direct
112.	25.	all	all,
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299.	10.	ſyſtem that,	ſyſtem is, that,
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Ibid.	penult.	vexations	vexatious
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